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WILDLIFE IN NORTH CAROLINA

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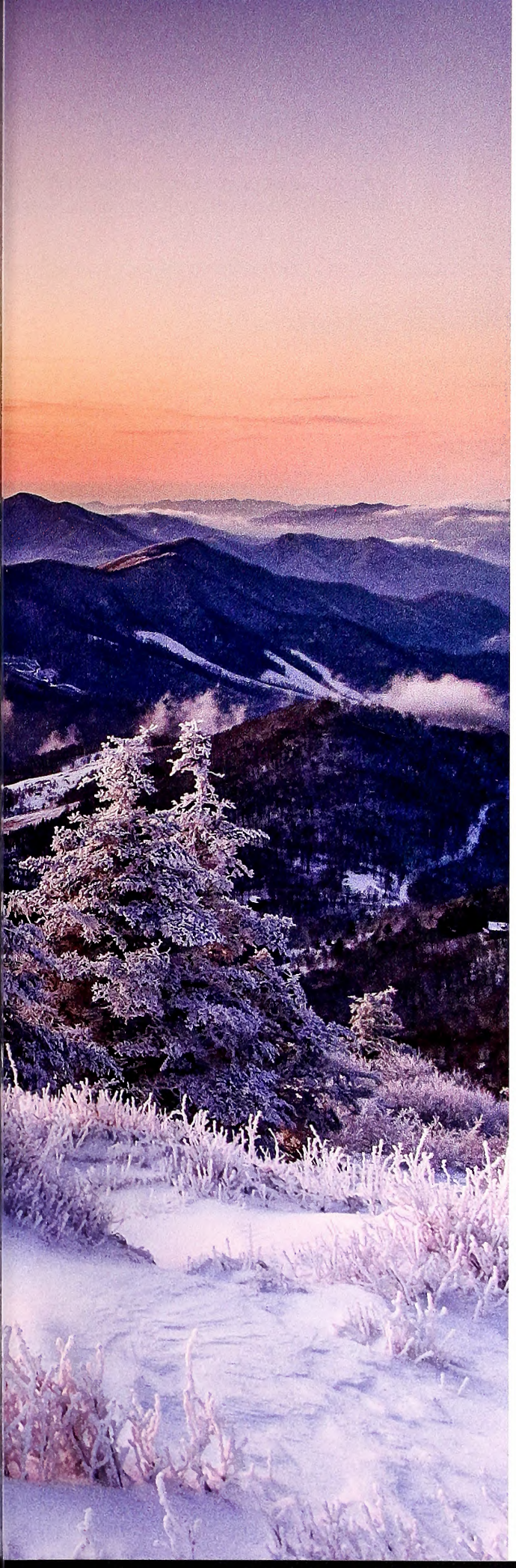
WILDLIFE IN NORTH CAROLINA
2012 PHOTO COMPETITION

Sharon Canter of High Point slept in her car during a 24-degree night to get up early enough to capture this image of Round Bald at Roan Mountain near the North Carolina-Tennessee border. **PHOTOGRAPH BY SHARON CANTER.**



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WILDLIFE IN NORTH CAROLINA

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Cover: Meet *Tabanus lineola*, winning model of this year's photo contest. This portrait of a female striped horsefly is the Grand Prize winner in the 2012 Wildlife in North Carolina Photo Competition. PHOTOGRAPH BY MICKEY C. MOTEN.

Wildlife in North Carolina is the official educational publication of the North Carolina Wildlife Resources Commission. It is dedicated to the sound conservation of North Carolina's wildlife and other interrelated natural resources and also to the environment we share with them.

EDITOR'S NOTE

For some of us whose passions involve hunting and fishing, the beginning of the year makes an end of things. Fishing is but a mellow thought of spring and summer and fall; deer season has ended, although with any luck you've tucked venison into the freezer.

CHIP LAUGHTON

For upland hunters, though, now is the time to begin our pursuits. No more concerns about interrupting someone's deer hunt. The woods, golden broomstraw fields and brier thickets lay waiting for quail and rabbit and squirrel hunting. I've enjoyed all three, although quail hunting was the thing that sparked a fire in my head.

I began my quail career just as the decline of Northern bobwhites began in North Carolina and the Southeast. The decline was subtle enough that most of us failed to take note. It was like growing old — one day you realize something has changed and you simply did not realize it while it was occurring.

These days I talk and think of bird hunting more than I do it. I encounter people all over the state who love to hunt the little brown birds, but they don't get out much anymore. Part of that is age; the other is the paucity of bobwhites. I've enjoyed talking about quail with Joe Bennett of Pilot Mountain, a longtime hunter who smiles and puts his hand on my elbow when remembering the good days. We share a fondness for setters over pointers and consider it unlikely that a quail resides today in Surry County.

Joe lived and worked in Greensboro for 35 years before retiring from Burroughs (now Unisys), but returned to Surry County all that time to hunt quail. "I had bird dogs from the time I was 15 until I was 75," he says. "Then the quail went away and my last dog died." By that time, Joe and his beloved wife Polly had been living in the country outside Pilot Mountain, having settled in his grandfather's refurbished house. These days, after Polly's recent passing, Joe says he's trying to accustom himself to living alone. "Don't even have computer in the house. I've got a cell phone, but that was my wife's. I figured I'd keep it. A few moments later he smiles and says, "You know, if I had a good dog, I'd start the whole thing all over again."

And that's the way of many bobwhite men. The flame may flicker, but a good and true love of something, or someone, always burns.

Jim Wilson

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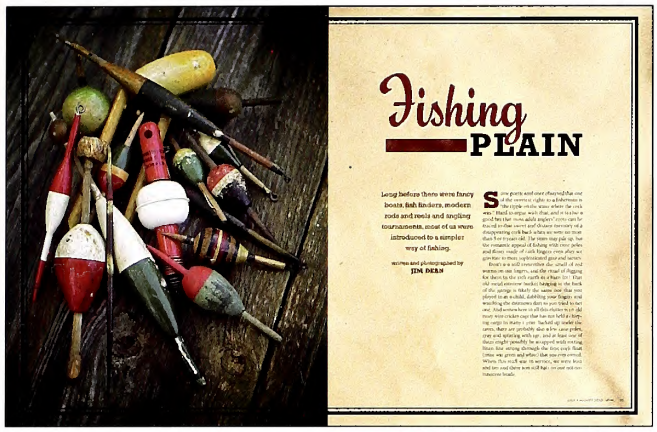
Fishing PLAIN

Long before there were fancy boats, fish finders, modern rods and reels and angling tournaments, most of us were introduced to a simpler way of fishing.

words and photographs by JIM DEAN

Memories On The Chowan

Jim Dean's story in the July-August edition ("Plain Fishing") was right on. I grew up in Cofield in the 1950s, and my older brother took me fishing in the Chowan many times. My favorite spot was at the mouths of two creeks at Holiday Island. I would save my pennies and buy a cane pole with the line and cork already on it for a dollar at the corner general store. In those days the fish were plentiful and so were the snakes. When I was a little older we would take a rifle with us to shoot the snakes if they were close, up until the wildlife officer made us stop.

We would rent a boat at Jim's Tackle or at Mullins Canal and put my brother's 10 horsepower Marlin on it and off we would go. My brother Simon Barnes had a garage in Cofield, so whenever he wanted to go fishing we did not have far to go. While I do not know Jim Dean personally, I am sure we would have had much in common with the good ol' Chowan and the outgoing, friendly folks that were all around.

Jim, thanks so much for bringing back the good memories of a simpler, enjoyable time in our lives. I still visit the Chowan on occasion, but neither the fish nor the snakes are there as they were back then. Thanks again.

William Terry
Tarboro

Unparalleled Pier

Your story on the new Jennette's Pier in the July and August 2011 issue ("The New Jennette's Pier") was great. My family and I went to the Outer Banks for a fishing trip October 27 for a week. Our first intention was to stop at Nags Head and see the pier. From the boardwalk, to the fish with names on them, to the inside displays and fish in large aquariums, to the wind power and the walk to the end of the pier, Jennette's was just awesome. You really have to see it to believe it. By the way, while we were there, Hurricane Sandy was really blowing offshore and had the three wind turbines on the pier sounding like helicopters.

Frank McSwain
Lincolnton

Crows and Bobwhites

Long ago the Flat Earth Society decreed that the earth was flat. They then discounted every idea that did not comply with their idea. Today's version of the Flat Earth Society has decreed that the reason quail are a vanishing species is loss of habitat. That's their story and they're stickin' to it. Problem is, it ain't so.

Rabbits inhabit the same terrain, and while rabbit hunters will say there are fewer rabbits now, there are still lots of hunters and so lots of rabbits. Turkeys are flourishing in the same areas that used to have quail.

Hawks, owls, foxes and so forth are a distant second among the reasons for vanishing quail. Rabbits and other small gamebirds are still here. Must be something else. There is.

You can find the major reason every day in every field that used to have quail. It is the common crow! Each field that crows are feeding in has a guard posted at a nearby high point. So, the moment a mother quail brings her young into the field, they are spotted by the crow and eaten. Every person who spends time observing wildlife has seen mother birds in hot pursuit of crows carrying their young.

Can this theory be substantiated? Yes! Check the increase in crow population in the same areas that quail are vanishing. The Cornell Institute, the Carolina Bird Club and the Audubon Society can supply the data.

Walter Kent
Lenior

Remembering a Legend

Thanks to Geoff Cantrell for his article on the Jack Cabe hopper, named for and designed by his father-in-law. I have been fly-fishing for trout in our mountains for more than 40 years. After reading the article I tied some Jack Cabe flies and fished with them this fall, catching and releasing the best two trout of the season, both browns.

I love to tie and fish with flies that were designed by fly-tiers and fly-fishermen from western North Carolina, like the Adams Variant, Sheep Fly, Yaller Hammer and others. I will add Jack Cabe to my list of legendary fly-fisherman and tiers. Men like Fred Hall and Jim Casada from Bryson City, Newland Saunders and Cap Weise from Lenoir, Roger Lowe from Waynesville, Don and Kevin Howell from Brevard, and Bo Cash from Morganton. What made, and makes these men legends is their willingness to teach and share their knowledge. Jack belongs with this group. He would be pleased with Geoff's article.

Mike Ramsey
Newton

Photographic Excellence on Display

Every issue, it is a treat to see the new illustrations and photographs Melissa McGaw has produced for *Wildlife in North Carolina*. They are crisp and imaginative in setting the right tone, and bring alive and enhance the stories in which they appear. We the readers are the fortunate beneficiaries. Thank you, Melissa.

Jon Maxwell
Greensboro

We want Your Feedback

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WILDLIFE IN NORTH CAROLINA 2012 PHOTO COMPETITION

The Wildlife in North Carolina Photo Competition attracts photographers of all types, many of whom bring tens of thousands of dollars of equipment and years of experience into the field in hopes of capturing prize-winning images. But in the end it's the brain behind the equipment that ultimately makes the difference. Our grand prize winner, Mickey Moten, is proof.

Moten, of Kings Mountain, used a $400 camera, some homemade equipment and a dose of ingenuity to come up with the winning picture, a shot so strong that it was a unanimous choice among the four judges. Moten had some thoughts on winning.

"I'd like to thank my wife, two daughters, and great friends for all their support and encouragement," he said in an email. "As far as my photography is concerned, I'd just like the readers to know that you don't necessarily need to have the latest and greatest photographic equipment to take nice photos. My basic setup consists of a $400 camera, $65 flash and $75 macro lens, which is fairly inexpensive, as I'm sure you know, considering many very good DSLR [digital single lens reflex] lenses out there cost well over twice that alone. I've got a homemade diffuser attached to the flash; those are the white reflections you see in the water drops. One of my macro accessories is a small bottle sprayer that will spray a very fine mist of water. The point is to get out there, with whatever camera you own, and have fun."

Moten said he discovered that macro photography has a definite learning curve. A large percentage of the photos he's taken are not "keepers," but if you are persistent, you'll improve over time.

"That's the great thing about digital photography in general; once you're past the initial investment, the only other thing used is your time," he said. "If you're learning and doing what you enjoy, then I'd say it's time well spent. Please express my gratitude to the judges for selecting one of my photos as their favorite. I am still astonished by all of this. A co-worker of mine, David Elliott, used to bring me his *Wildlife in North Carolina* magazines when he finished reading them, so that my family and I could enjoy them as well. David is a beekeeper and all around one of the nicest people I know. Actually he was the one who encouraged me to submit some photos to your annual competition."

This was the first year the competition was open to subscribers only, so the total number of entries was down, but not the quality. A total of 1,611 images were entered in the following categories: Animal Behavior, 192; Birds, 267; Invertebrates, 209; Outdoor Recreation, 116; Reptiles and Amphibians, 163; Wild Landscapes, 208; Wild Plants, 190; Youth 12 & Under, 38; and Youth 13–17, 66.

Marsha Tillett, art director at *Wildlife in North Carolina* and one of the four judges, commented on the winning photo. "This image was so striking, the color, the composition, the depth of field," she said. "We all just really liked it. And the water droplets on the eyes really made this an engaging image."

The other three judges were Mike Dunn of the N.C. Museum of Natural Sciences; *Wildlife in North Carolina* graphic designer Alyssa Stepien; and magazine photographer Melissa McGaw. Each judge picked his or her top 10 images in each category, and then all were reviewed on a television screen. During the second viewing, a judge had to vocally support an image or it was culled. A final vote set the winners.

All winning photographs may be seen on exhibit through March at the N.C. Museum of Natural Sciences in Raleigh.

–Mike Zlotnicki

Mickey C. Moten, Kings Mountain
Striped horsefly, Kings Mountain

I've just gotten into photography again over the past year or so. Macro photography has opened my eyes to a whole new world I never noticed before, and as a result, I've gained a new appreciation for these small creatures. The shot: A female *Tabanus lineola*, aka striped horsefly, sitting on some *Liatris* in one of our flower beds. I had never had the opportunity to photograph one of these flies with such amazing eyes before, so I was very cautious not to move too quickly. I clicked off a few shots, zoomed in and took a few more. Since it didn't attempt to fly away, I decided to spray a light mist into the air. In this case, I sprayed it lightly and from a few feet away so as not to irritate the fly. I took a few more pictures before she left (mostly out of focus). The result in the competition is my favorite of the bunch.

(Panasonic DMC-FZ100, 108mm (600mm equivalent) Raynox DCR-250 macro lens, ISO 100, f/8, 1/640 of a second, YongNuo YN-560 Speedlite with homemade diffuser)

BIRDS **FIRST PLACE**

Robert Travis, Cedar Mountain

Male ruby-throated hummingbird, Cedar Mountain

I noticed this male ruby-throated hummingbird flying around next to a feeder which had been set up to attract the birds. I soon realized that this particular hummer kept flying to one or two branches in his "territory," so I set up on one of his perches and waited. It wasn't long before I captured this image. I was reminded of something a naturalist had told me about watching animal behavior: If you take the time to observe, the actions of the subject will give you a good idea of what it will do next. This has served me well in my photography.

(Canon EOS 5D Mark II, Canon EF 500mm f/4 L IS USM lens, ISO 1250, f/7, 1/1600 of a second)

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BIRDS **SECOND PLACE**

Ellen Devenny, Kings Mountain
Chickadee, Kings Mountain

Outside our kitchen window there is a window box which we lined with carpet that our two cats enjoy sitting in. One morning in April around 7:30 a.m., I spotted a little chickadee busy gathering cat fur to line her nest. The bird continued gathering cat fur in her beak while I quickly grabbed my camera. This image was taken through the window and shot at a high ISO. This was handheld. I was only a few feet away from the bird on the other side of the window when this shot was taken. I thought it ironic that the enemy of the bird was the unknowing provider of the fur that was to line the nest.

(Canon 50D, Canon 24–105mm L series lens, ISO 1250, f/4, 1/200 of a second)

BIRDS **THIRD PLACE**

Charles English, Wilmington
Kingfisher, Airlie Gardens

The photo was taken at Airlie Gardens Wilmington. I had been seeing this kingfisher land on some small branches about 2 feet out of the water every morning for two or three days. I decided to put my blind up the next morning and wait. After three hours he flew in to land and I was ready. He even had a fish for the photo.

(Canon 5D Mark IV, Canon 500mm lens and 1.4x tc, ISO 1250, f/7.1, 1/500 of a second, manual mode)

MAMMALS **FIRST PLACE**

Karl Chiang, Greenville
Bull elk, Cataloochee Valley

I took this photo of the bull elk in Cataloochee Valley two years ago on a crisp fall morning in October. I had been there the day before, but I wanted to see them in the morning light. I was shooting another elk when this elk walked across the misty valley bugling with the morning light behind him to backlight his silhouette. I was about 200 yards away. I went back again another day, but I have never gotten a better picture. I have photographed elk out west, but this herd in North Carolina has always fascinated me. I hope they can someday be plentiful again in our state for the general public to appreciate.

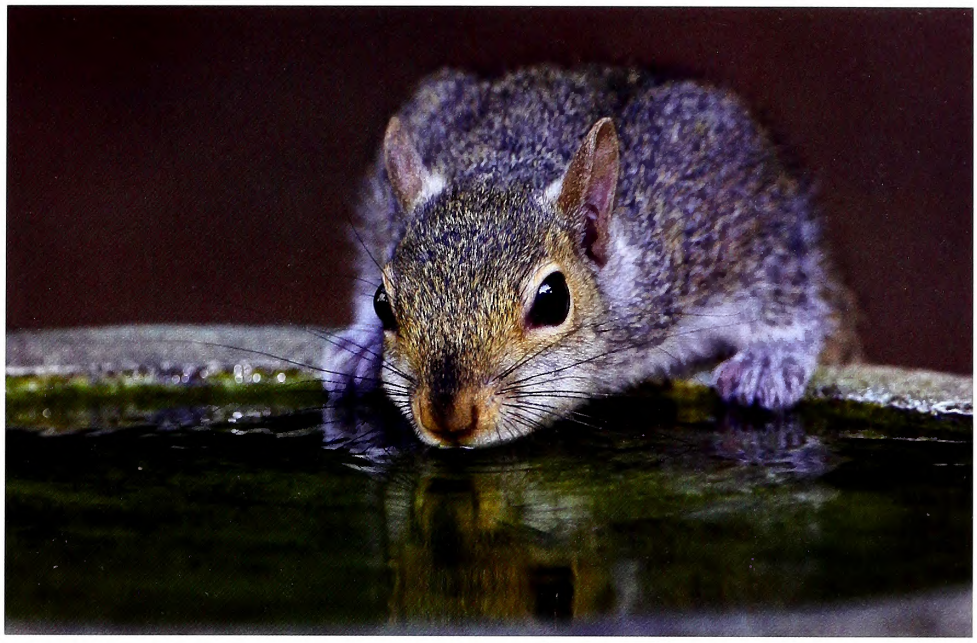
(Nikon D300, 200–400mm Nikkor lens at 400mm, ISO 200, f/14, 1/200 of a second, Manfrotto tripod)

MAMMALS **SECOND PLACE**

Ed Ziegler, Raleigh
Squirrel close-up, Raleigh

Numerous bird feeders and a bird bath in our backyard provide an opportunity to spend time capturing images of visitors. Squirrels feast on seeds that drop from the feeders and occasionally pause for a quick refreshment. I just happened to be out on the deck with camera in hand to capture one of our guests.

(Canon EOS-1D Mark IV, Canon EF500mm f/4L IS USM lens + 1.4x tc 700mm, ISO 800, f/6.3, 1/320 of a second)

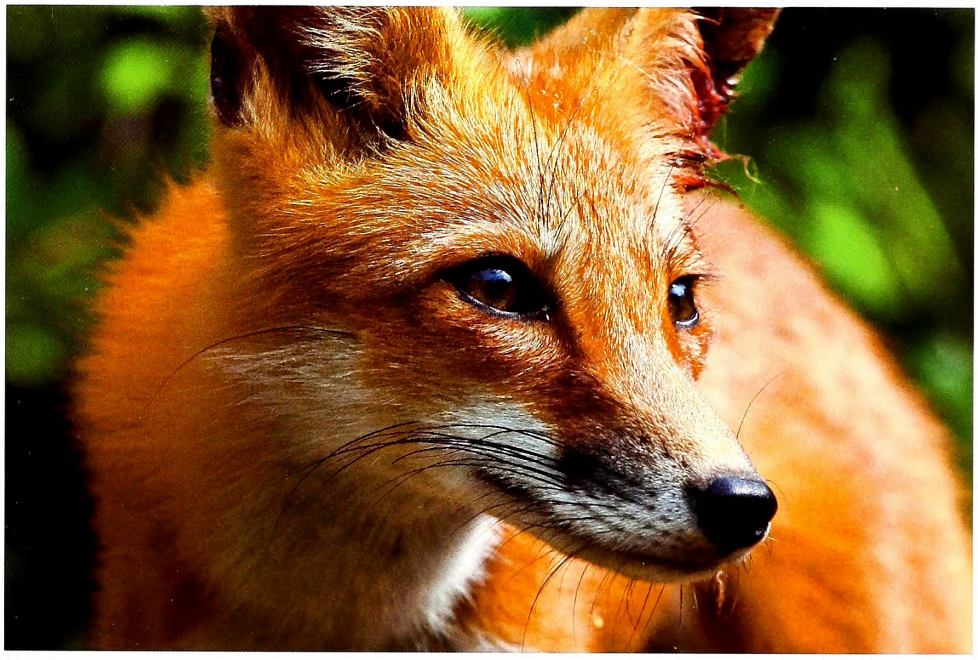


MAMMALS **THIRD PLACE**

Stephen Atkins, Weaverville
Red fox, Asheville

This fox lives less than a mile from downtown Asheville. He is regularly seen poking in and out of the bushes. He has at least two siblings who are much warier and rarely let themselves be seen. He had recently tangled with something that injured his ear when this picture was taken. The last time he was seen, his ear was completely healed and his winter coat was coming in.

(Nikon 300s, Nikon 70–200 f/2.8 Nikkor lens at 200mm, ISO 250 , f/11, 1/125, aperture priority)



REPTILES & AMPHIBIANS **FIRST PLACE**

Sharon Canter, High Point
Tree frog, High Point

Tree frogs are common visitors to my back door on summer evenings. They typically cling to the glass door in order to search for insects attracted to the house lights. On this August evening, I decided to photograph my visitor in this interesting "underside pose." I turned on the outside patio light and then quickly assembled my equipment. Of the several shots that I took, this first pose with his outstretched toe pads and side view of his head became my favorite. It was nice to have my photography subject actually come to my back door for his portrait session.

(Nikon D300s, Nikkor 105mm lens, ISO 200, f/14, 1/60 of a second, Nikon SB-800 Speedlight)

REPTILES & AMPHIBIANS
SECOND PLACE

Stephen Atkins, Weaverville
Box turtle, Weaverville

A friend had told me about a turtle nest she found hiking the day before near her home. I asked her to show me, and I was surprised 24 hours later to find three little turtles still struggling to escape their eggs.

(Nikon D80, Sigma 150mm f/2 macro lens, ISO 200, f/16, 1/60 of a second, Nikon SB-600 Speedlight)

REPTILES & AMPHIBIANS
THIRD PLACE

Kirby Samantha Lua, Hillsborough
Anole, Chimney Rock State Park

It was a sunny afternoon in Chimney Rock when my family and I stumbled across this anole peeking out from between the craggy boulders. I am always on the lookout for wildlife, and he was the perfect subject, posed as if he knew that I was taking his picture.

(Canon EOS Rebel T3, Canon 18-55mm lens at 55mm, ISO 3200, f/5.6, 1/500 of a second, on Automatic)

INVERTEBRATES **FIRST PLACE**

John Petranka, Chapel Hill
Praying mantis, Johnston Mill Preserve

Because the light was becoming too bright and contrasting, I was about to pack up for the morning when I came across this praying mantis. This time the high contrast between light and shadow worked in my favor as the mantis emerged from the shaded interior of a plant and peered out into the bright sunlight. The camera exposed for the brightly lit head and legs, shifting the background exposure into deep shadow.

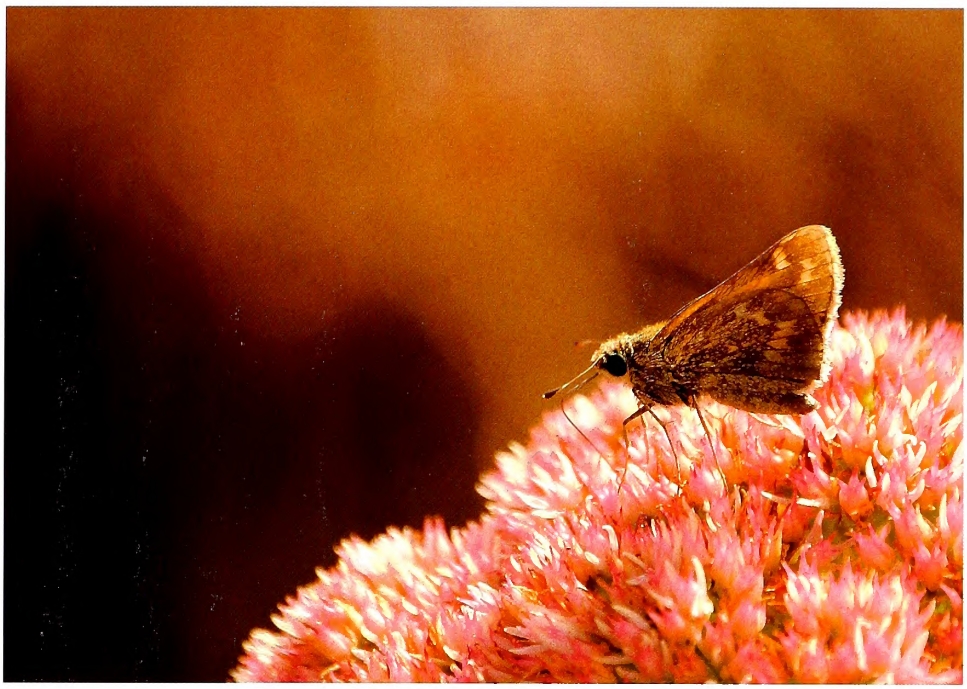
(Canon EOS XSi, Canon 100mm macro lens, ISO 400, f/9, 1/125 of a second)

INVERTEBRATES **SECOND PLACE**

Tyler Lee Bailey, Browns Summit
Skipper, Browns Summit

The picture was taken in Browns Summit in the field in front of my house. It is a reversed roadside-skipper. The picture was taken in mid-September. I was out walking around enjoying the beginning of the fall colors, looking for something to photograph when I came across a plant covered in these tiny butterflies. I got to a vantage point that I liked and waited until there was only one butterfly in the frame and then snapped the picture.

(Nikon D3000, Nikkor 55–200mm VR lens at 200mm, ISO 200, f/8, 1/400 of a second)



INVERTEBRATES **THIRD PLACE**

Stephen Atkins, Weaverville
Orb weaver spider, Weaverville

My son had caught the orb weaver spider near our home in Weaverville and suggested I get a picture of it on a sunflower that had grown under our birdfeeder. When I saw the results, I sure was glad he asked me to get my camera!

(Nikon 300s, Sigma 150mm f/2.8 macro lens, f/8, ISO 320, 1/15 of a second)

WILD PLANTS **FIRST PLACE**

John Petranka, Chapel Hill
Dewy grass, Chapel Hill

One of the things that I like most about macro photography is that you can find interesting subjects just about anywhere. I took this shot as the sun rose over a hayfield across the street. I noticed the sunlight glistening in the grass, grabbed my camera and tripod and found this pleasingly symmetrical plant decorated with droplets, each a tiny lens forming an inverted image of the sunrise.

(Canon EOS XSi, Canon 100mm macro lens, ISO 100, f/13, 1/60 of a second)

WILD PLANTS
SECOND PLACE

Sharon Canter, High Point
Rhododendron, Roan Mountain

My husband and I love to hike at Roan Mountain especially during the June Catawba rhododendron bloom. In order to arrive for sunrise on Grassy Ridge, however, we had to leave our house a little after 1 a.m. After enjoying and photographing a beautiful sunrise, I was attracted to this location where I could compose a photograph with fresh close-up blooms as well as more distant blooms in warm, early morning light. We both agreed that our effort was worth the experience!

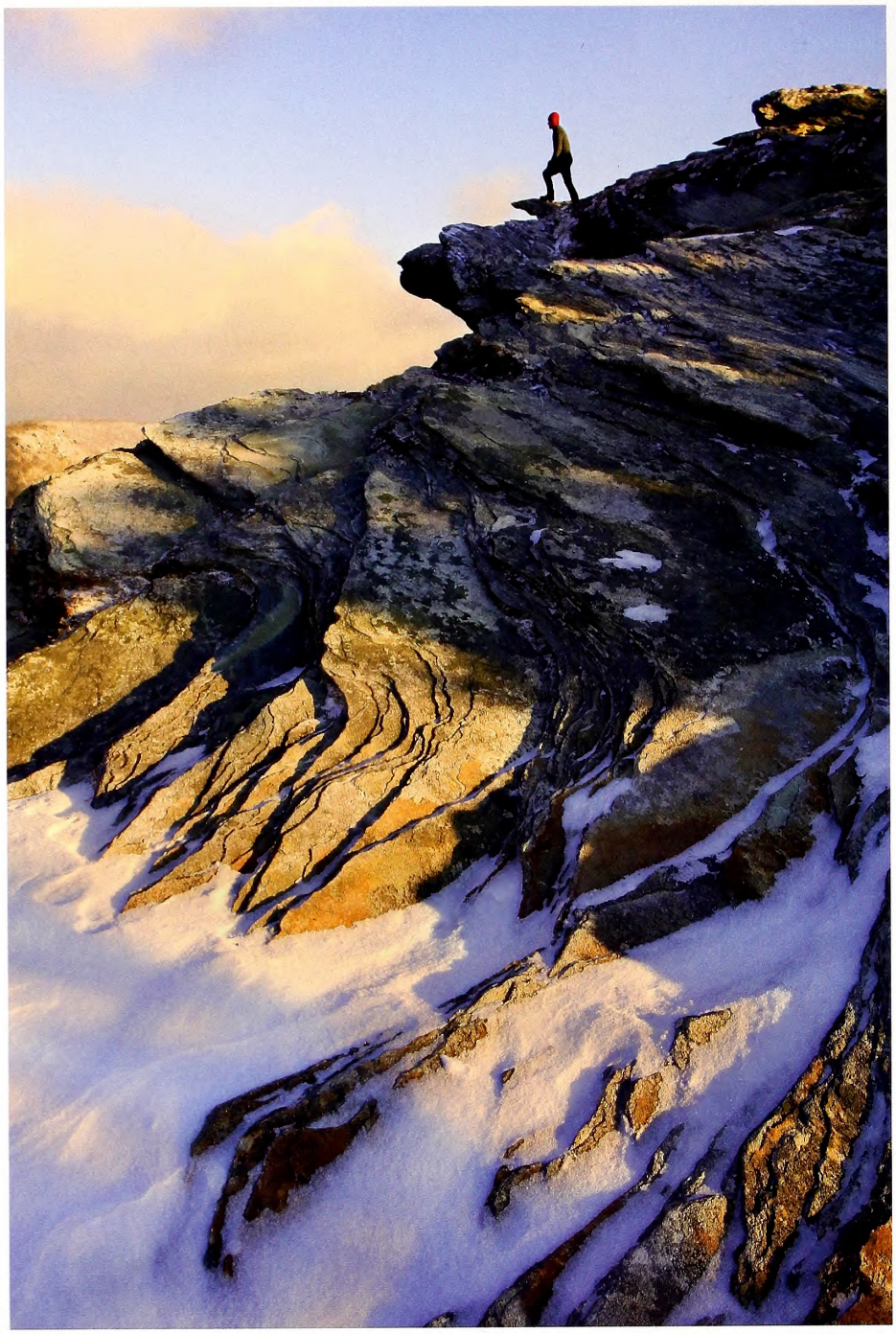
(Nikon D300s, Nikkor 18–200mm lens at 18mm, f/22, 1/25 of a second, with the aid of a reflector)

WILD PLANTS
THIRD PLACE

Stephen Atkins, Weaverville
Fiddlehead, Weaverville

After learning about the Fibonacci sequence from my young nephew, my children and I went for a hike on our property looking for examples in nature to photograph. When we returned, we had enough fiddlehead pictures to fill a bucket.

(Nikon D80, Sigma 150mm macro lens, ISO 200, f/16, 1/4 of a second, Aperture priority)



OUTDOOR RECREATION **FIRST PLACE**

Scott Hotaling, Cullowhee
Hiker, Hawksbill Mountain

Adventure—that was the goal of this photograph. I wanted the audience to get a feel for the same adventure I experienced accessing this location on a cold, winter morning. A good friend who is a fellow photographer and I made a long trek down snowy, unplowed roads to the trailhead followed by a hike through dark, snow-covered woods. The rocky outcroppings at the top provided the perfect location for watching the sunrise and a dramatic setting.

(Canon 5D Mark II, Canon 17–40mmL lens at 17mm, ISO 400, f/14, 1/125 of a second)

OUTDOOR RECREATION
SECOND PLACE

Jake Orr, Topsail Beach
Rameseas, off Morehead City

I captured this image during the Big Rock Blue Marlin Tournament in Morehead City aboard the *Rameseas* in June of 2011. Each morning during the tournament, upward of 60 boats make their way out of the inlet just before dawn, racing east past Cape Lookout as the sun breaks the horizon. The picturesque sportfishers rigged for a day offshore creates a one-of-a-kind sight that I was fortunate to capture in this photograph.

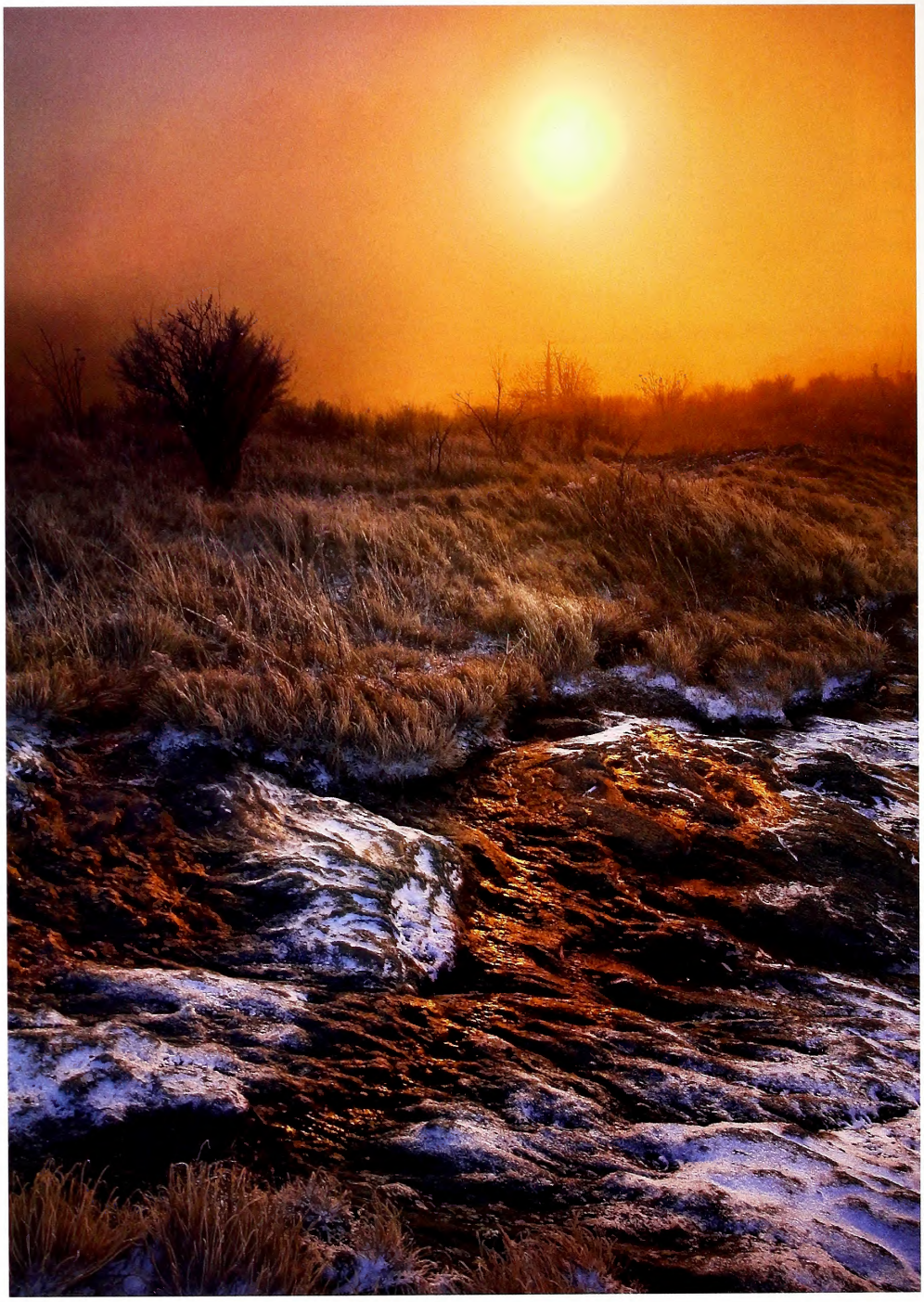
(Canon EOS Digital Rebel XTi, Canon 17–40mm f/4 L lens at 18mm, ISO 400, f/3.5, 3/10 of a second, Canon Speedlight 430 EX II)

OUTDOOR RECREATION
THIRD PLACE

Charles English, Wilmington
Surfer, Wrightsville Beach

This photo was taken on Wrightsville Beach the afternoon after Hurricane Irene passed. I went down to the beach to check the surf and get some shots of the passing storm. I noticed a surfer walking towards me and got down low to the ground to get him entering the photo and to get the dark clouds and the surf. The surfer looked liked he was surfed out. I converted it to black-and-white for impact.

(Canon 5D Mark II, Canon 24–105mm lens ISO 400, f/14, 1/160 of a second, AV mode)



WILD LANDSCAPES **FIRST PLACE**

Scott Hotaling, Cullowhee
Frozen field near Black Balsam, Blue Ridge Parkway

What looks like a summer evening with trickling water and grasses is actually a brutally cold, frozen sunrise landscape. The light dusting of snow is often mistaken for sand. To make the photograph work, I wanted to capture a sense of depth. This frozen trickle surrounded by icy grasses served as a great leading line into the foggy winter sunrise. A two-stop hard graduated neutral density filter was used to balance the exposure.

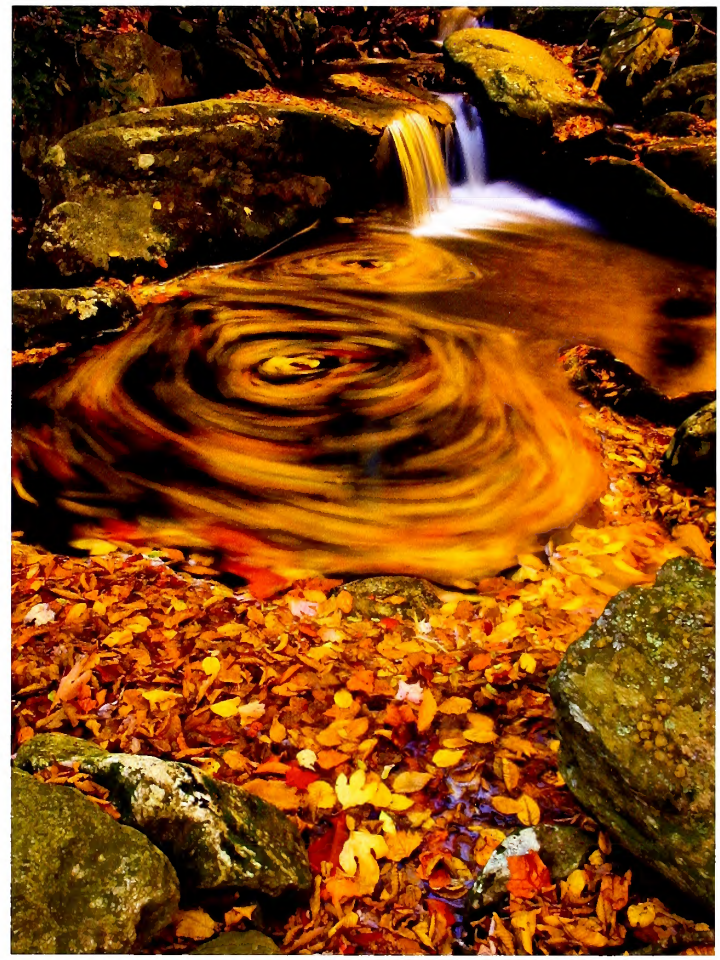
(Canon 5D Mark II, Canon 17–40 lens at 20mm, ISO 250, f/16, 1/15 of a second)

WILD LANDSCAPES **SECOND PLACE**

Wick Smith, Fayetteville
Calloway Peak, Grandfather Mountain

I began my hike at 4:30 a.m. from the parking lot of the swinging bridge at Grandfather Mountain. I followed the Profile Trail for about one mile to the Attic Window peak. I was hoping to get a sunrise shot from that location. The wind was blowing about 20–30 mph, and the dense fog was racing over the mountain. It occasionally cleared enough in 30-second increments to see Calloway Peak and the sun beyond. This was taken at 6:20 a.m., just after sunrise in one of the few opportunities I had.

(Canon 5D Mark II, Canon 24–105mm lens 4.0 at 47mm, ISO 100, f/18, 1/15 of a second)



WILD LANDSCAPES **THIRD PLACE**

John Riley, Raleigh
Swirling leaves, Wilson Creek

I found this little cascade while searching for leaf-filled pools at Wilson Creek during the fall of 2010. The brilliant golden glow from the backlit fall canopy made this spot special. Notice the whiter water on the right edge of the cascade shaded by overhanging rock. To get an exposure long enough to show movement of the leaves, I used two polarizing filters.

(Nikon D700, Nikkor 28–70mm lens at 28 mm, ISO 100, f/22, 8 seconds)

ANIMAL BEHAVIOR **FIRST PLACE**

Charles English, Wilmington
White ibises, Airlie Gardens

This photo was taken at Airlie Gardens in Wilmington. While I was walking one morning in the gardens around 11a.m., I noticed all the white ibises in this dead tree that the birds like to land on. I took some shots but didn't like them. I came back next morning and they landed about the same time. They all were jockeying for position on the limbs. Two of them just could not get along. This is what I focused on. I named it "A Misunderstanding."

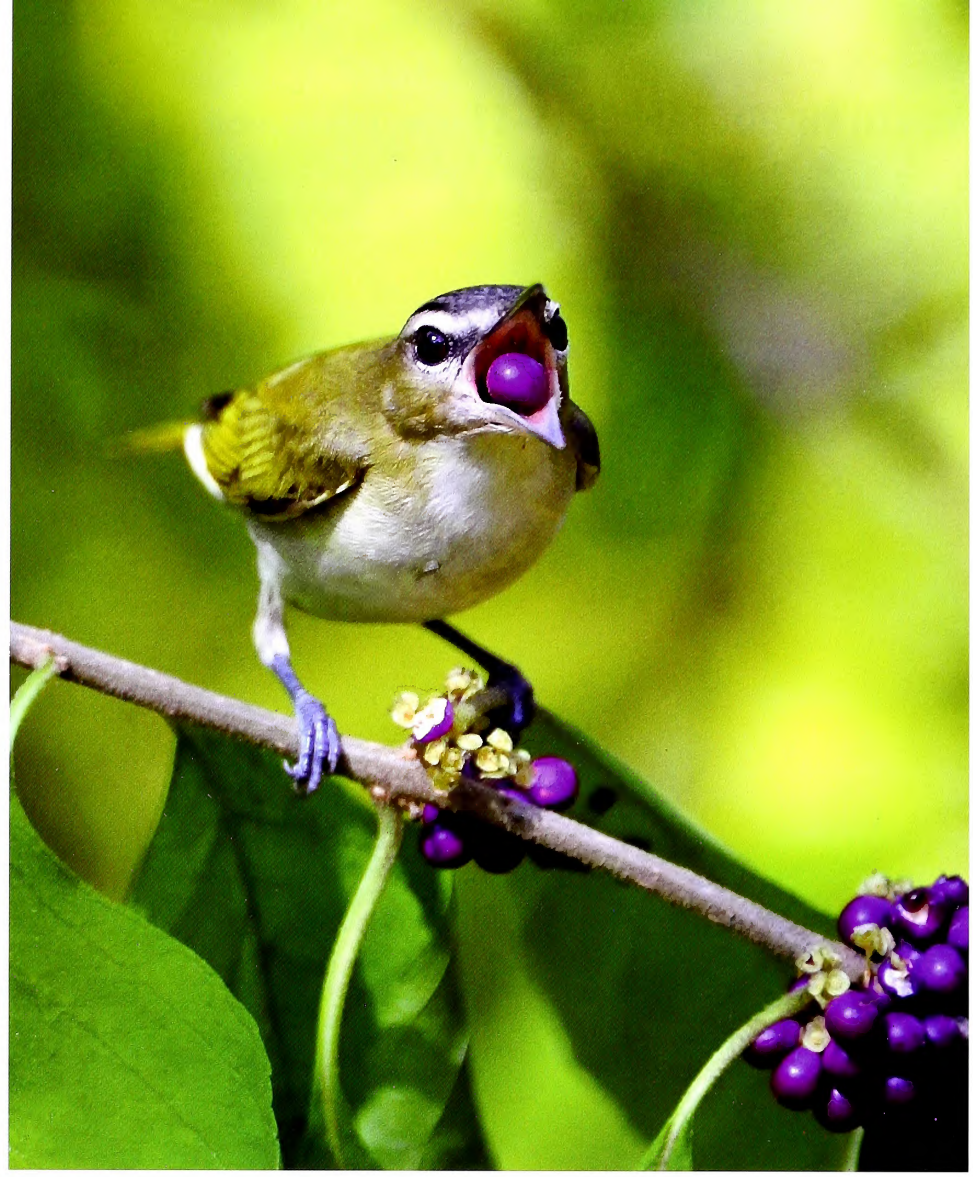
(Canon 5D Mark IV, Canon 70–200mm lens 2.8 with 2x tc, ISO 800, f/13, 1/1250 of a second, manual mode)

ANIMAL BEHAVIOR
SECOND PLACE

James Parnell, Wilmington
Red-eyed vireo, Wilmimgton

About two years ago a beauty berry *(Callicarpa americana)* plant came up in my wooded backyard about 30 feet from a family room window. Last fall it was loaded with berries, and a variety of birds were feasting on the berries. I opened the nearest window blind and set my camera in the open window. The red-eyed vireo was one of the several species photographed, but was the only one that I captured in the process of swallowing a berry whole.

(Nikon D3s, Nikkor 600mm f/4 lens with 1.4 tc, ISO 1,600, f/5.6, 1/1,000 of a second)

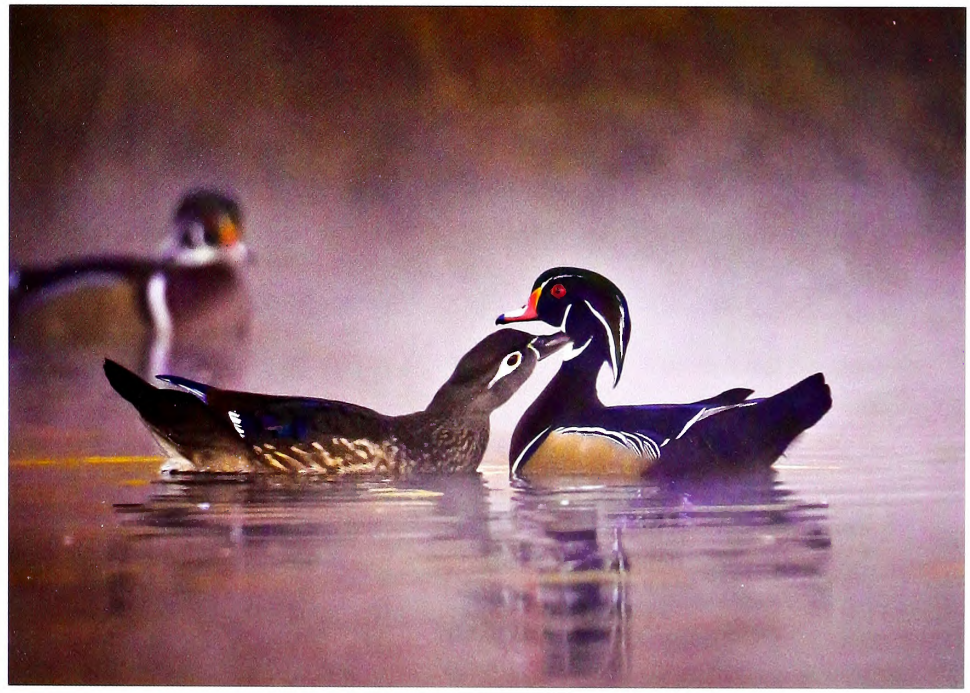


ANIMAL BEHAVIOR
THIRD PLACE

Ed Erkes, Seven Springs
Wood ducks, Seven Springs

The image was taken on a foggy morning on my 1-acre backyard pond last spring, where I've been photographing wood ducks for the past year and a half. The hen is performing a courtship behavior called allopreening. The behavior, when a duck preens the feathers of its mate, is thought to strengthen the pair bond. The ducks on my pond are very skittish, and all photography has to be performed from a camouflaged blind. The wood ducks feed on my pond each morning and evening. I have to be in my blind before they begin to arrive at about 30 minutes prior to sunrise. I leave the blind after they leave the area, usually about 9.

(Nikon D700, Sigma 300–800mm lens, ISO 1600, f/5.6, 1/400 of a second)



YOUTH PHOTOGRAPHER 13–17
FIRST PLACE

Lucas Bobay, Holly Springs
Hummingbird, Holly Springs

After taking out the trash, I noticed this hummingbird flying around a light in my garage, so I ran inside and grabbed my camera. I climbed up onto our boat to get at eye-level with the bird, and began shooting. The hummingbird's speed and the dark surroundings proved to be a challenge, but I managed to capture the bird illuminated against the black background. Fortunately, the hummingbird found its way out of the garage a few minutes later.

(Canon EOS 7D, Canon EF 70–200mm f/4 lens, ISO 2000, f/4.5, 1/1250 of a second, Manual Mode)

YOUTH PHOTOGRAPHER 13–17
SECOND PLACE

Alyssa Hester, Cornelius
Green tree frog, Wendell

My grandfather had wanted to photograph a green tree frog for a while, so one day while I was out with him we found this one in a tube that my grandfather set up. Photographing the frog was fun, but required patience because it kept jumping everywhere and we had to try to catch it and put it back on the branch. This is a neat little creature and has a unique color and look to it. Very eye catching—that is if you can spot him.

(Canon EOS 30D, Canon EF 70–300mm f/4-5.6 IS USM lens at 300mm, ISO 1600, f/5.6, 1/125 of a second. Standard flash on camera used)

YOUTH PHOTOGRAPHER 13–17
THIRD PLACE

Jacob Thomas, Waxhaw
Fly, Fairview

I was at my grandma's house talking about my week at school on her glider swing, when suddenly I stopped my chatter and pulled out my camera. A fly had just landed right next to me and it was too good for the photographer in me to pass up. In one swift motion, I documented this simple fly's landing. This picture captures the simple beauty in the everyday things we take for granted.

(Olympus SZ-31MR; ISO 80, f/4.4, 1/200 of a second)

YOUTH PHOTOGRAPHER 13–17
HONORABLE MENTION

Kirby Samantha Lau, Hillsborough
Dandelion, Hillsborough

The clear blue sky and vibrant yellow petals of a dandelion formed the perfect contrast for a simple picture with a high influence from the idea of changing perspectives. My thought was that the viewer would be given the opportunity to see the world from the eyes of a beetle, or maybe a bee. These creatures seen as insignificant by many, actually make an impact in our ecosystem.

(Canon EOS Rebel T3, Canon 18–55mm lens at 55mm, ISO 320, f/5.6, 1/800 of a second, Automatic setting)

YOUTH PHOTOGRAPHER 13–17
HONORABLE MENTION

Kelly McLendon, Wilmington
Broadhead skink, Wilmington

I was sitting on the front porch with my mom this past summer in Wilmington when she saw this huge lizard on the bricks. I ran in to get my camera and was lucky to get this shot because he ran away very quickly after the picture was taken. I just used the automatic setting on my Nikon Coolpix P80. My dad looked at the picture and thinks it might have been a broadhead skink, but this is the first time that I have ever seen anything like that here.

(Nikon CoolPix P80, 21mm, ISO 141, f/4.5, 1/60 of a second)

YOUTH PHOTOGRAPHER 13–17
HONORABLE MENTION

Julia Sonis, Chapel Hill
Mating toads, Chapel Hill

Every year we go down to the creek behind my house to watch the toads gather in mating season. The male toads are so excited that they will sometimes grasp onto your fingers because they think you might be a female toad. We make this trip every year, and this year, I borrowed my mom's camera to take some pictures of the toads. It is a cool place that has beavers and many other animals.

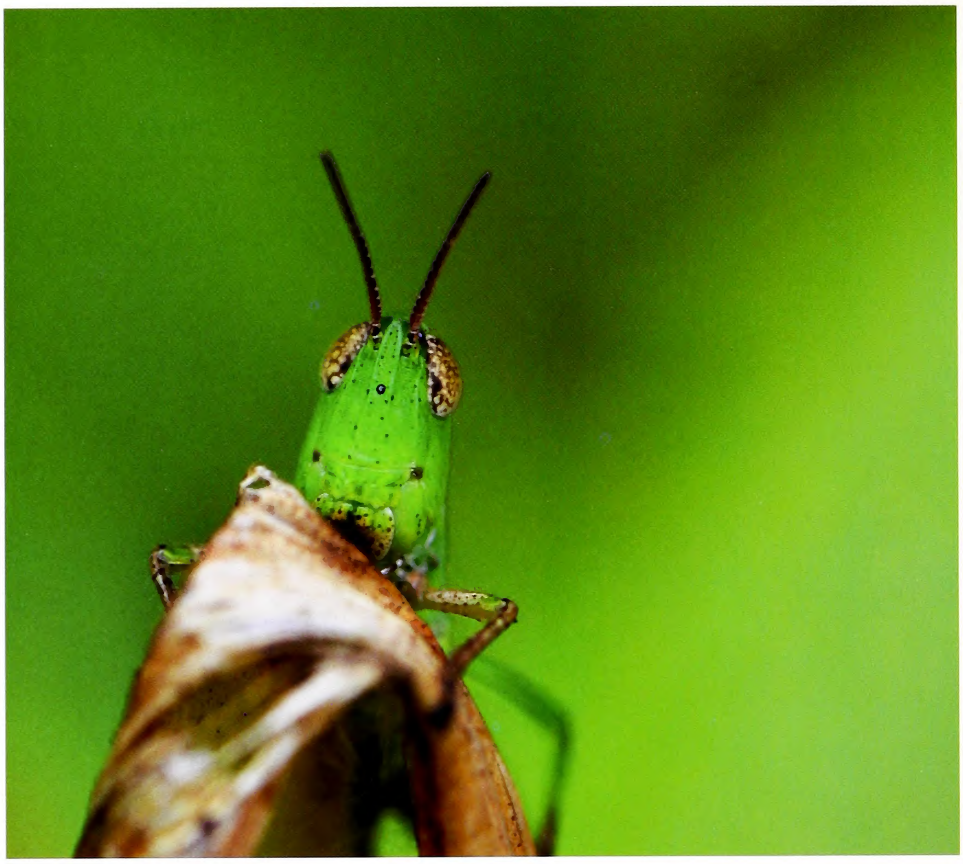
(Canon 7D, Canon 70–300mm L lens, ISO 1250, f/7.1, 1/250 of a second)

YOUTH PHOTOGRAPHER 12 & UNDER
FIRST PLACE

Emma Kate Halstead, Walkertown
Bumblebee on sedum, Walkertown

I took this photo last September in my yard on some sedum blooms. This bumblebee was very cooperative and let me take a bunch of pictures of it, and this was the best one. I love the detail on its fuzz and wing. The flowers were in full bloom and bees were all over them. I took this photo with my mom's camera.

(Nikon D40, 85mm lens, ISO 800, f/8)



YOUTH PHOTOGRAPHER 12 & UNDER
SECOND PLACE

Emma Kate Halstead, Walkertown
Grasshopper, Walkertown

I took this photograph in my yard on a sunny day in July 2012. My mom and I were walking around when we saw this cute little grasshopper that looked like it was smiling, and I decided to take a picture of it. It was sitting on some wilting iris plants. I took this picture with my mom's camera.

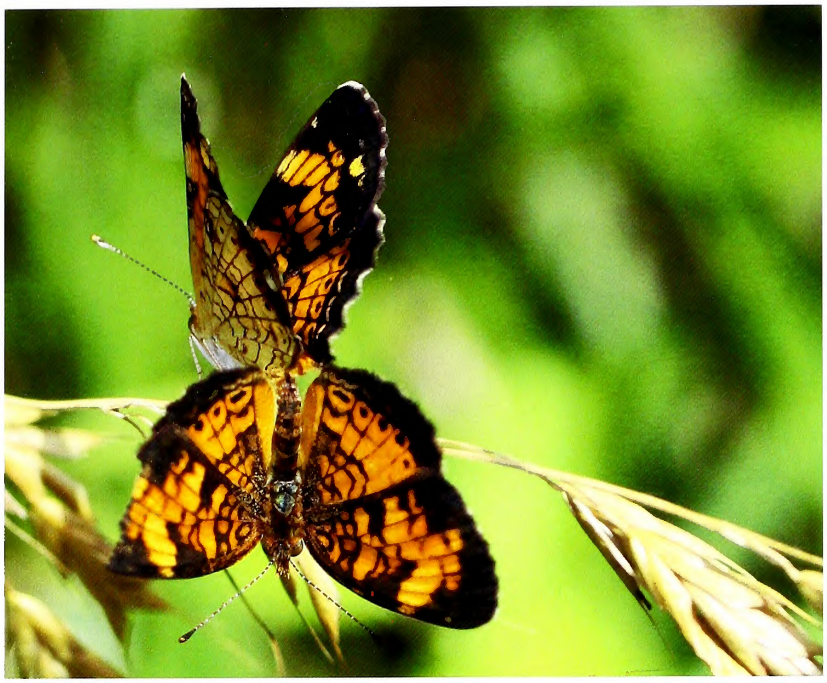
(Nikon D40, 85mm lens, ISO 800, f/8)

YOUTH PHOTOGRAPHER 12 & UNDER
THIRD PLACE

Susanna Swicegood, Shelby
Skink, Shelby

I like looking at *Wildlife in North Carolina* magazines. When I saw the photo contest, my daddy and I thought I should enter. I got my mom's camera and started shooting. This five-lined skink was running around on our deck, and I was taking pictures of it. It stopped in this position and I thought it would make a great picture, so I snapped it. Later, when I looked at it, I thought it looked really neat the way the stripes on his back went one way and the wood grain went the other way.

(Sony DSC-H20, 63mm focal length, ISO 80, f/4.4, 1/640 of a second, flash)

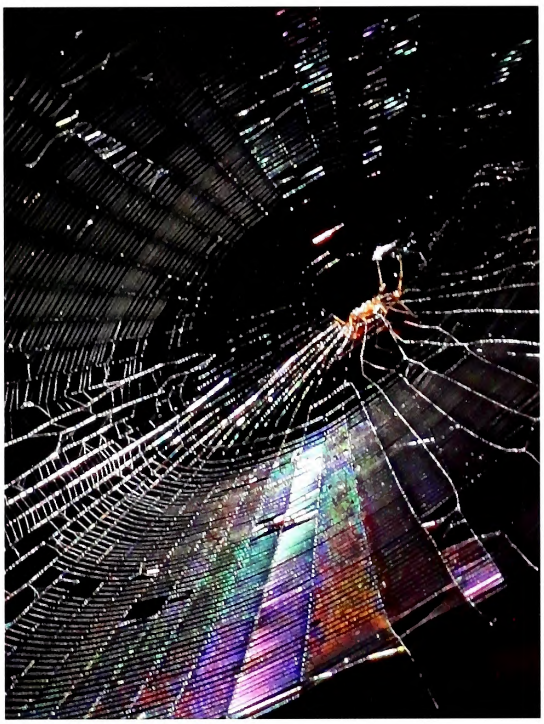


YOUTH PHOTOGRAPHER 12 & UNDER
HONORABLE MENTION

Coleman Davis, Swan Quarter
Pearl crescents, Lake Mattamuskeet

In July I took a lot of walks near my home so I could learn how to identify butterflies and dragonflies. I always carried a camera with a macro lens so I could photograph the species I saw and then identify them later. I took this picture on a warm morning while walking along a path near Lake Mattamuskeet. This pair of pearl crescents allowed me to get very close.

(Canon EOS 50D, 60mm lens, ISO 640, f/4.97, 1/3200 of a second)



YOUTH PHOTOGRAPHER 12 & UNDER
HONORABLE MENTION

Zane Carlson, Swannanoa
Rainbow web, Blue Ridge Parkway

Getting a spider web to show up in pictures is hard. I saw this spider web with rainbows in it and really wanted a good picture of it. I decided to zoom in and push the exposure value button all the way to the darkest setting so the background would be black and the spider web would show.

(Sony Cyber-Shot DSC-HXSV, Sony G 10x optical zoom lens at 42.5mm, ISO 400, f/5.5, 1/250 of a second)

YOUTH PHOTOGRAPHER 12 & UNDER
HONORABLE MENTION

Julia Scruggs, Huntersville
Fawn, Huntersville

I have always wanted to enter the *Wildlife in North Carolina* photo contest. I got a camera for Christmas last year and took pictures all year but not one of them seemed like a winner. Then one day my dad came back from mowing on his tractor and said come quick and see this fawn! So I grabbed my camera and we walked down to the field and found it curled up.

(Sony DSC-S2100, ISO 100, f/5.4, 1/500 of a second, flash)

Trout in the Classroom, a multifaceted learning program, has grown from a handful of schools to 30 in a few years.

Teaching *with* Fish

Written by Geoff Cantrell & Photographed by Melissa McGaw

Trout eggs from a commission hatchery which have been previously fertilized are used for the classroom projects. They will take a week or so to hatch, depending upon water temperature. Fry with yolk sacs attached swim free. After about a week the yolk sacs are gone and the fry will swim and search for food during their 6–8 week juvenile stage.

Trout in the Classroom is a program that puts trout into classrooms, to be sure, but it is much more than a fish-behind-glass project for kids.

Yes, there's an aquarium and, with plenty of guidance, participating students raise trout —from eggs to fry to fingerlings. But this project achieves much, much more. It is, in the words of students, parents, teachers and facilitators, something transformative and positive, and at times even an emotional experience. While it is a life journey for the trout, it is a life experience for students, who learn about the importance of water quality and how ecosystems work, while honing important math and science skills, and more. And the program is expanding.

"You couldn't ask for a better program to be in our classroom," said Dana Keeney, a teacher at William Ellis Middle School in Davie County. "The students love it. And it makes such a difference in their lives, really. It gets them out of the 'nose in a textbook' mode and into hands-on learning in a way that makes sense to them and allows them to connect with the outdoors."

Trout Unlimited, the conservation group with a strong network of chapters in this state, uses partnerships to get the program into public schools. It is a flagship program of their youth education efforts. Caring for fish is intended to foster a conservation ethic in students, and the act of walking to a stream bank and directly releasing fingerlings into the water makes for a very real connection between caring for fish and caring for water.

"The most important factor for having the Trout in the Classroom program is the involvement of the students," Keeney said. "According to the North Carolina Department of Public Instruction, the 8th grade is to learn about the water on earth, the hydrosphere. Having the trout, here in the classroom, allows the students the opportunity to have a hands-on experience as we study the water on earth and the importance of keeping the water clean and using it wisely."

Each Trout in the Classroom project culminates with the release of sterile trout into a selected river or stream, under the strict supervision of N.C. Wildlife Resources Commission fisheries biologists. It is not a stocking project.

"At the release event the students have the chance to get in the water and learn from professionals how to follow up on the information they gained in class," Keeney said. "The most rewarding aspect of having trout

At the end of a Trout in the Classroom program the sterile fingerlings are released into a selected river or stream.

in my classroom is the release day when students who seem to be passing time in class become so very involved in the release process and learning about the macro invertebrates in the water. The students return to school and talk to their peers about the things they learned on the trip and to share the pictures of the kids in the water. The two years I have had the chance to release the trout have been exciting to see my students bloom in the outdoor setting.

Five classrooms utilized the program in North Carolina in 2008, somewhat of a test year by Trout Unlimited in this state after some initial start-up projects here and there in preceding years. With assistance and support from volunteers and local businesses, it is now in some 30 schools located in the Piedmont, Foothills and Mountain regions with a proximity to coldwater tributaries.

"As Trout in the Classroom grows in North Carolina, the strain for resources to fund and support the programs has become a challenge," said Steve Hennings, with the Blue Ridge chapter of Trout Unlimited, based in Winston-Salem and an early motivator for the project statewide. "There are a few schools that have requested the project, but were turned away because of no funding or the lack of a Trout Unlimited chapter in their area. It would be great to let the sportsmen and communities in the state know that they can be a part of Trout in the Classroom by sponsoring a project. Or they can be directly involved at the school by giving presentations and demonstrations on related subjects to the students."

Hennings said the program has been able to do so much because of the support of the N.C. Wildlife Resources Commission, particularly the Division of Inland Fisheries biologists.

"I've been very lucky to work with the Trout in the Classroom program, and the same could be said for working with the Blue Ridge TU Chapter—those guys are great," said Kevin Hining, a fisheries biologist with the Wildlife Commission. "To see those guys and their involvement at a purely volunteer level is amazing to me. The program provides not just an experience that I think all kids would term 'neat'—the hatching and rearing of fish in class—but it also provides an avenue for resource managers, such as myself, to discuss a wide variety of natural resource topics. These topics include fisheries management, aquatic habitats, water quality, resources conservation, and, of course, fishing."

Teachers like that Trout in the Classroom has a prescribed lesson plan and performance goals, but is readily adaptable within any individual school setting. The flexible aspect helps, but there are key elements that remain standard for participation.

Students must:

- Monitor tank water quality
- Engage in stream habitat study
- Learn to appreciate water resources
- Begin to foster a conservation ethic
- Grow to understand ecosystems

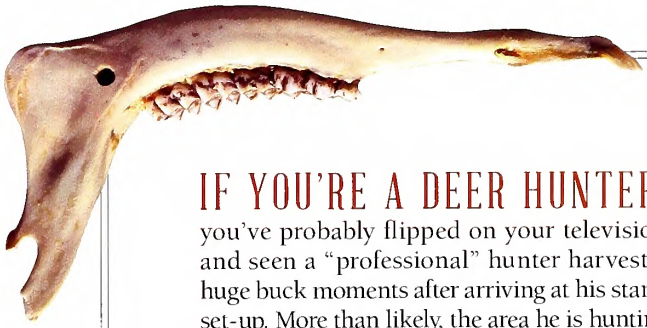
"I have used Trout in the Classroom to teach my ecosystems unit," said Marty Creech, a teacher at North Davie High School in Davie County. "We have explored carrying capacity, biotic, abiotic, necessities of life, water chemistry and many other things. In the past my students have had a difficult time identifying abiotic factors other than objects they can see, such as rocks. Having this tank allowed them to understand better that abiotic factors are indeed factors such as temperature, ammonia and nitrate levels. Carrying capacity is better understood using this project. I plan to use it in all of my cycles of life instruction."

Geoff Cantrell of Balsam is a public information officer with the N.C. Wildlife Resources Commission and a longtime trout angler.

MICROMANAGEMENT FOR WHITETAILS

EVEN ON LITTLE PROPERTIES, PROPER MANAGEMENT CAN REAP BIG REWARDS.

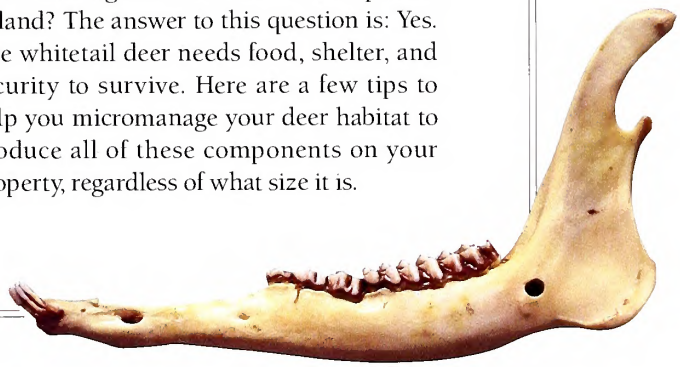
WRITTEN BY ANDREW WALTERS



IF YOU'RE A DEER HUNTER,

you've probably flipped on your television and seen a "professional" hunter harvest a huge buck moments after arriving at his stand set-up. More than likely, the area he is hunting is intensively managed for deer—hundreds of acres of prime land and an expansive budget to care for those acres.

The question remains for the rest of us regular hunters, with real jobs and limited resources; can we manage our deer herds for better hunting even if we have smaller parcels of land? The answer to this question is: Yes. The whitetail deer needs food, shelter, and security to survive. Here are a few tips to help you micromanage your deer habitat to produce all of these components on your property, regardless of what size it is.



MELISSA McGAW/NCWRC

Before entering the stand these days, many hunters have a greater knowledge of what their land holds, thanks to many "modern" scouting devices such as trail cameras and satellite imagery.

TIMBER. WHAT TIMBER?

The first thing many people fail to understand in managing property is timber management. If you only lease the land you hunt, you obviously cannot thin the timber nor have it harvested, but with the landowner's consent, you can modify some trees to better suit your hunting needs. First, set aside a sanctuary, a place where no hunting or human interaction will occur. This area can be anywhere from 5 acres to 20 acres depending on the size of the property. The sanctuary should be a place where deer may bed down during the winter months or where the does may have their fawns in the spring.

To help make a sanctuary more appealing for deer, you can hinge-cut trees, preferably trees that will allow other beneficial trees to gain more nutrients and produce better crops. A hinge cut is made by cutting a tree trunk about three quarters of the way through. Once the tree falls, it will continue to grow and provide more bedding cover as the fresh shoots and stems sprout from the tree and provide browse that the deer could not previously reach. This also opens up the forest floor to more sunlight and allows native plants such as trumpet creeper and ragweed to sprout. This can also be used in creating travel corridors and funnels that allow you to more effectively hunt them. This is a two-for-one deal that provides deer with food and shelter in one area.

THE SUMMERTIME HOT SPOT

All deer consume minerals naturally, whether it is a large mature buck or a 6-month-old fawn. Lactating does will frequent mineral sites in the early spring; this is because does produce high quality milk regardless of nutrients, but increased nutrient intake can boost the quantity of the milk. This also gives the fawns a head start when they are born and helps them survive their first few vulnerable months. The bucks I have surveyed will most likely visit the mineral sites in early to mid-summer and well into the early fall. The minerals that these bucks consume help their overall skeletal structure, along with their antlers.

Most biologists recommend one mineral site per 50 acres, but if your hunting site is only 50–75 acres, you may want to place two or three mineral sites at a few areas that differ in terrain and cover. These sites can be simply a mineral block or something of your own design. It will not hinder your management to have more than the recommended number of mineral sites on your property.

Usually when a buck returns to his core area after roaming, especially during the rut, the first place he will go to will be the mineral site. While I do not recommend hunting over a mineral site, because deer usually associate these areas with security, they are a great place to file an inventory of your herd and allow you to know exactly when your target buck is back in your hunting area. This will create a hot spot that most deer on your land will visit regularly. This is a technique that I learned in the early fall of 2010 while I was hunting a 125-inch eight-pointer. Like most bucks tend to do, he vanished once he shed his velvet. I noticed that whenever he came back to my tiny 35 acres, the first place he went to was a mineral site I had established. I later harvested the 200-pound behemoth at 14 yards with my compound bow.

Establishing mineral sites will ensure that the deer on your land will be healthier than they would be without the minerals, but don't expect them to increase their antlers by 30 inches just because you placed minerals out.

A MANAGER'S BEST TOOL

Trail cameras have been wildly successful and are helping tremendously with deer management. There are many different cameras to choose from, all of which have special features to help you catch that buck you're after—at least on film. One of the primary ways this helps hunters and managers is they may have pictures of an older, bigger buck and may decide to pass up a shot at smaller young buck. This not only helps the overall age structure of the herd, but also allows hunters to harvest a larger buck.

The trail camera recommendation is similar to the mineral site rule, one per 50 acres, but you can place quite a few cameras out as long as the deer don't start avoiding your hunting area because of too much intrusion from checking the digital chips for pictures. Many hunters use rubber gloves and boots to reduce scent when checking cameras. If your property is small, 20–30 acres, you must be very careful about how often you check your trail cameras before the season. Cameras are not just for the fall and winter months. There is

F. EUGENE HUSTER

IN ORDER TO HARVEST A

TROPHY BUCK,

YOU MUST BE ABLE TO RECOGNIZE HIM WHEN YOU SEE HIM.

MYBAITSHOP/ VEER

much to be learned by capturing images of your deer herd year-round, such as bedding areas, preferred food sources, trails and funnels. Trail cameras can be relatively inexpensive and a great tool for any manager, so utilize all of your resources and purchase one to increase your probability of managing a healthier herd.

THE TRUE TROPHY

While everybody wants to harvest a 170-inch Boone and Crockett buck, the truth is that in many places this may never happen. The reality is that in North Carolina, and many Southeastern states, most bucks that top 100 inches are considered trophies. So while many hunting clubs have a "point rule," this is not the most effective way to successfully grow mature deer. A mature deer is at least 3.5 years of age.

For example, a 2.5-year-old eight-pointer may score 115 inches and easily meet an antler requirement such as three points to a side or a 16-inch width. This deer has at least a year or two before he is fully mature and shows his full antler and skeletal growth. On the same farm there is a 4.5-year-old six-pointer that doesn't meet all the requirements and scores 98 inches and cannot be harvested. You tell me which buck is the true trophy.

Many hunters are starting to realize that a mature 4.5-year-old buck is just as much, if not more of a trophy to tag as a younger buck, even if his rack scores less. The day after Christmas in 2011, I was perched in a pine tree not far from a buck's bedding area. When he started to work his way to a food source, I intercepted him at 53 yards. This was the 98-inch six-pointer that I just mentioned. A jaw bone tooth analysis confirmed my thought of him being 4.5 years old. He was not my biggest buck, but he was one of the oldest ones. Mature bucks are smart, sneaky and have survived more seasons than most bucks will. In this case, the age is the true trophy and antlers are the bonus.

KNOW THEM WHEN YOU SEE THEM

In order to harvest a trophy buck, you must be able to recognize him when you see him. As stated previously, looking at a buck's headgear is not the best way to age him. Trail cameras have made aging bucks and does simpler, and if you are lucky enough to catch that buck on film you can judge him before the hunt and not

Many deer hunters key on oaks and acorns, but there's a lot more to a whitetail's menu. Switchgrass, greenbrier, persimmons and dogwoods are all popular browse items.

during. An older buck will have a swayed back and a plump belly that sags. If you have pictures of a young buck you may notice that his belly and back are parallel. This is not a mature buck. An older buck may also have a Roman nose, and his legs might appear shorter than a younger buck's. His thick neck will blend right into his chest and gives the impression of being top-heavy. These are the quickest ways to age a buck on the hoof, and while it won't tell you exactly how old he is, it will allow you to make the decision if he should be harvested or passed up.

Let's not forget the does; they can be aged similarly to a buck. This is proof that looking at the antlers is not the best way to age a buck, since does are not blessed with magnificent symmetrical racks that haunt every hunters dreams. It is better for the herd to have a close buck-to-doe ratio. The realistic ratio on small parcels of land is anywhere from 1:3 or 1:4. This is three to four does for every buck. In order to make this happen, hunters must choose carefully what bucks and how many does to shoot. Usually the oldest does will not produce twin fawns like younger does will, but the older does will have experience in hiding and feeding their fawns.

Fawn survival rates are higher among fawns that are born to older mothers. The downside to this is that the older does, especially the matriarch, is very territorial and may run the fawns out of her core area, which may be your hunting area, once they are a year or so old. This is especially true if she has buck fawns. This is nature's way of dispersion and keeping the herd healthy. Therefore, if you want to grow and hold deer, you may want to harvest the oldest does possible, to ensure that the buck fawns are not dispersed into parts unknown.

Many hunters think twice before they release an arrow at a doe early in North Carolina's September bow season for fear of shooting a nursing doe. According to Kip Adams, a biologist for the Quality Deer Management Association, nursing does will keep their lighter red coats longer before changing into their darker winter coats than other non-nursing does. The reason for this is that losing the red summer coats and growing thick winter coats requires the does to use more energy and protein. Does are less willing to give up these vital nutrients if they are trying to produce the best milk for their fawns. So if you are lucky enough to see any deer in an early season hunt, keep this in mind to ensure that no nursing does will be harvested. If a doe is harvested, the fawn will usually survive; especially if the fawn's white spots have disappeared, but if not it can be a detrimental blow to a new addition to your deer herd.

FOOD PLOTS AND NATURAL BROWSE

Many hunters are not fortunate enough to have land to plant food plots. This problem is magnified even more so on smaller pieces of land. In order to still hunt over some type of food source hunters can plant natural browse and eliminate the need for tractors and their expensive implements. The N.C. Forest Service recommends the establishment of switchgrass, yellow thistle and greenbrier because these are great natural vines and grasses that deer don't just find irresistible, but also find in their natural environment.

Trees and shrubs have the same effect on your deer herd, but it will take longer to reap the benefits. Trees such as persimmons, crabapples and flowering dogwoods are great for your herd. Just remember to plant male and female persimmon trees together and in close proximity to ensure that the trees will produce fruit. This is a great option for someone who leases land from a close friend, or a hunter who leases land for many consecutive years.

If you are able to plant any soft mast trees, be sure to place different varieties that will produce their fruit at staggered times throughout the hunting season. This helps to limit the deer herd from decimating your soft mast trees at one time. Also when the trees are planted in the ground, placing a PVC pipe or piece of plastic tubing around the trunk of the tree can help shield it from the antlers of rutting bucks in the fall or the mice and other rodents that like to gnaw at the base of a sapling tree for its nutrients.

BACK TO THE BASICS

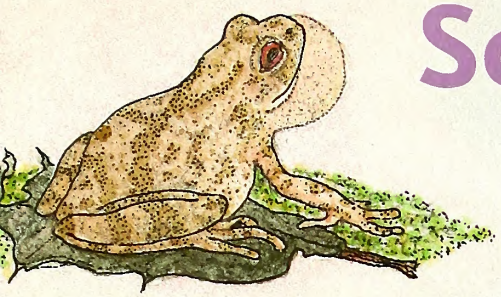
I have utilized these techniques and tactics on two separate pieces of hunting property, one being 35 acres and the other 64 acres. On these parcels of land I have harvested many does and four bucks in five years that were at least 3.5 years of age. More importantly, I have learned that while many hunters are trying to manage their land for better deer hunting, there is no shame in harvesting smaller young bucks, especially if a youngster or a hunter new to the sport tags a smaller-than-average buck. There is no point in managing your property, regardless of its size, if you cannot enjoy yourself and have fun while in the field.

Andrew Walters of Rocky Mount is a student in Wildlife and Fisheries Science at N.C. State University. This is his first story for Wildlife in North Carolina.

Reptiles may be warm-weather lovers, but when it comes to amphibians,

Some Like It Cold

written by Jeff Beane
illustrations and nature activity by Anne M. Runyon



Spring peeper calling

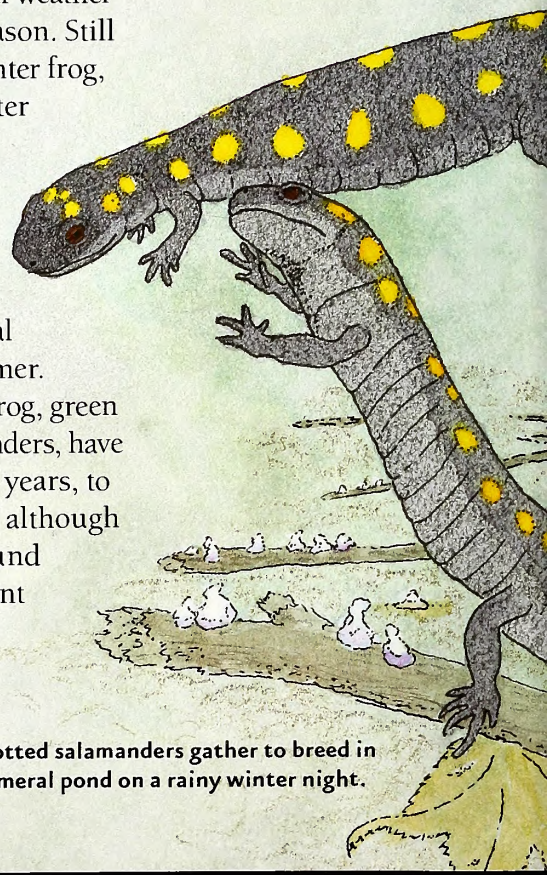
Ectothermic, or "cold-blooded," animals are often mistakenly regarded as creatures restricting their activity to the warmer months and hibernating in winter. While this is true of most reptiles and many other ectotherms, amphibians are primarily creatures of the cool and damp. Many species, in fact, are most active during the colder months, and some breed in the dead of winter.

WHO BREEDS IN WINTER?

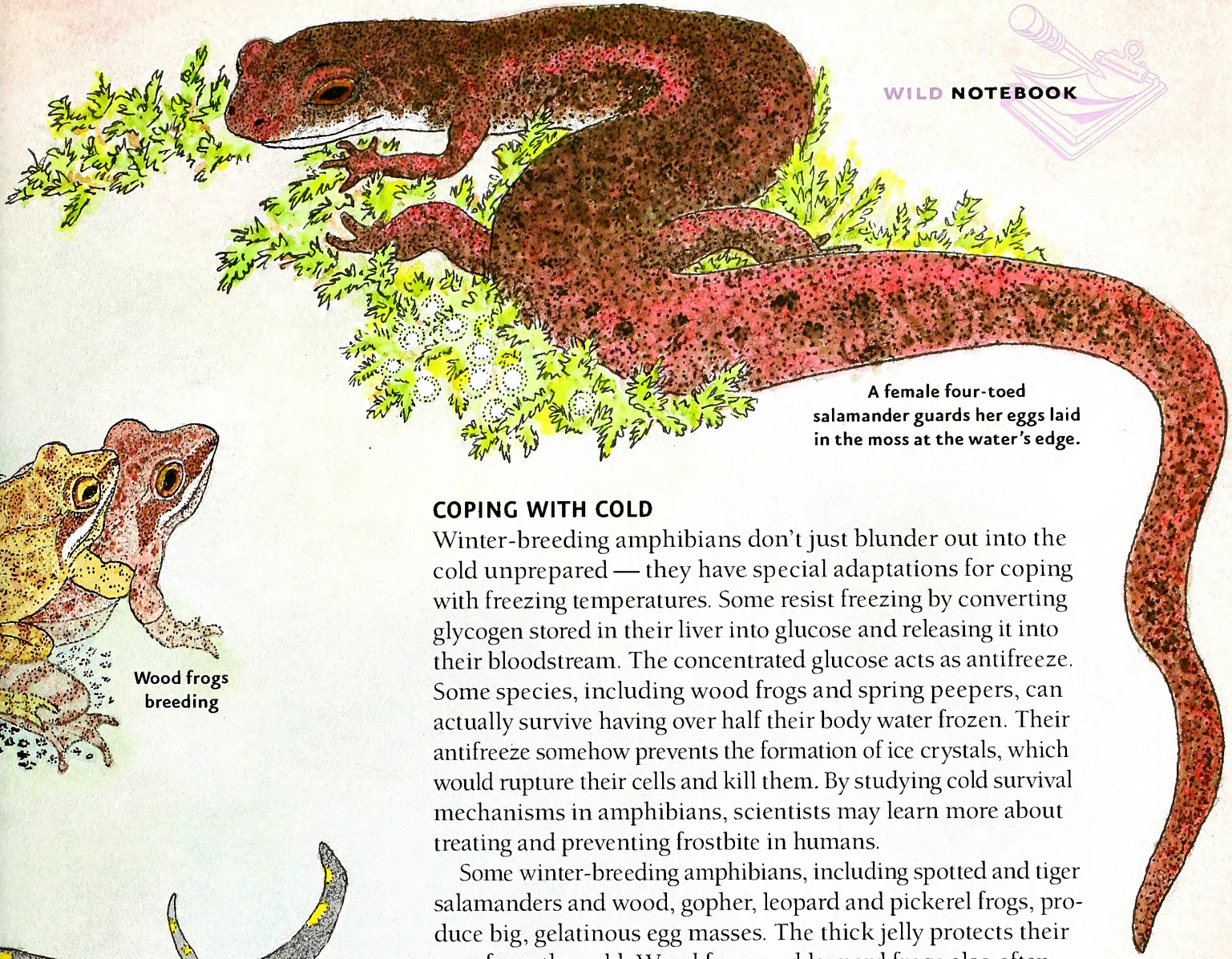
Of North Carolina's approximately 95 currently recognized amphibian species, well over a third typically use some portion of the colder months for breeding. Some, like the wood frog, spotted salamander and most chorus frogs, breed only in winter, or very early spring.

Others, like the Eastern spadefoot toad, Eastern newt, little grass frog and Southern leopard frog, may breed at almost any time of year if weather is favorable — precipitation is more important to them than season. Still others, like the Southern toad, Southern cricket frog, and carpenter frog, have a prolonged breeding season that may begin in late winter but last through summer. Marbled salamanders breed in early fall, but depend on fall and winter rains to hatch their eggs; in dry years their eggs may not hatch until mid-winter. Red and mud salamanders usually mate in summer or fall and lay eggs in fall, with the eggs hatching during winter. Red-backed and Southern red-backed salamanders are terrestrial breeders that mate in winter but don't lay their eggs until summer.

The larvae of some amphibians, including the American bullfrog, green frog, spring salamander and most of the dusky and brook salamanders, have long developmental periods, requiring many months, or even years, to reach adulthood. These species breed in permanent water, and although some of them breed in spring or summer, their larvae are around during all months of the year. There are almost as many different breeding strategies as there are amphibian species.



Many spotted salamanders gather to breed in an ephemeral pond on a rainy winter night.



A female four-toed salamander guards her eggs laid in the moss at the water's edge.

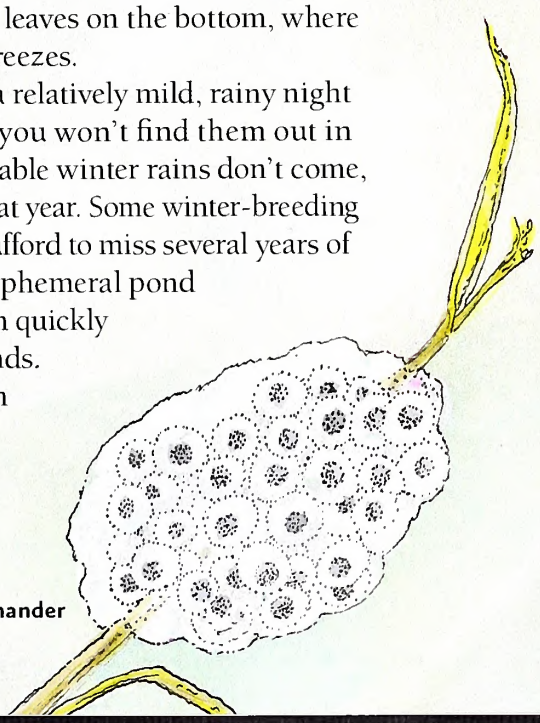
Wood frogs breeding

COPING WITH COLD

Winter-breeding amphibians don't just blunder out into the cold unprepared — they have special adaptations for coping with freezing temperatures. Some resist freezing by converting glycogen stored in their liver into glucose and releasing it into their bloodstream. The concentrated glucose acts as antifreeze. Some species, including wood frogs and spring peepers, can actually survive having over half their body water frozen. Their antifreeze somehow prevents the formation of ice crystals, which would rupture their cells and kill them. By studying cold survival mechanisms in amphibians, scientists may learn more about treating and preventing frostbite in humans.

Some winter-breeding amphibians, including spotted and tiger salamanders and wood, gopher, leopard and pickerel frogs, produce big, gelatinous egg masses. The thick jelly protects their eggs from the cold. Wood frogs and leopard frogs also often breed communally, depositing their egg masses in clusters, which further guards against freezing. Other species, including spring peepers, little grass frogs and Mabee's and mole salamanders, hide their eggs individually among leaves on the bottom, where they will be protected if the pond freezes.

Most amphibians must wait for a relatively mild, rainy night to move to their breeding sites — you won't find them out in extremely cold, dry weather. If suitable winter rains don't come, they may skip breeding altogether that year. Some winter-breeding amphibians are long-lived and can afford to miss several years of unfavorable breeding conditions. Ephemeral pond breeders grow rapidly and transform quickly before summer heat dries their ponds. Faced with a drying pool, some can accelerate their development and transform at unusually small sizes.



Spotted salamander eggs

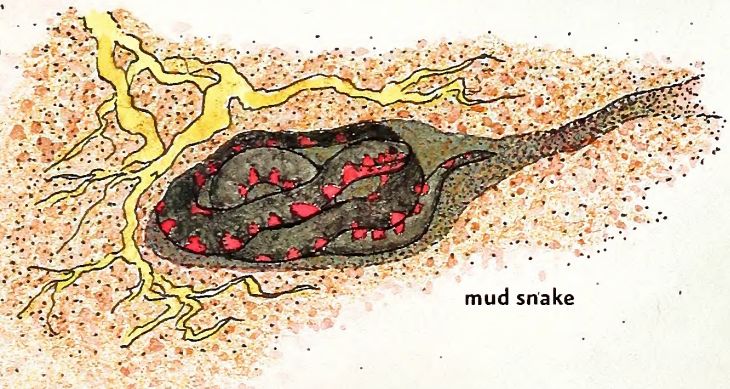
WHY BREED IN WINTER?

Many amphibians are more tolerant of cold than of hot, dry summers. Winter breeders avoid competition from summer-breeding species, allowing the same pond or wetland to be used all year. A major advantage of using ephemeral, or temporary, ponds is that they lack predatory fish. Winter is often the primary or only time that many ephemeral wetlands hold water; in summer they may be completely dry, necessitating their use during winter. Another advantage to winter breeding is that some predators, such as snakes and turtles, are inactive during the cold months. For those who can take the cold, winter breeding is good strategy.

Southern toad and eggs

Get Outside

Get a knowledgeable, willing adult to take you on a winter amphibian hunt. What you can expect to see depends on where you live. Learn what species and habitats are in your area. Woodland pools and other temporary wetlands are often the best places to look. Warm, rainy nights are best for amphibian movement. Lightly traveled roads bordering wetlands can be very productive, but you'll have to drive very slowly or (better yet) get out and walk. You'll need warm clothes, rain gear, boots or waders and a good flashlight or headlamp for night amphibian walks. By day, you might find salamanders beneath logs along wetlands, and some frogs will call during the day. Learn to identify egg masses. Eggs of some species, like spotted salamanders and toads, are easy to recognize. Keep records of the amphibians breeding in your neighborhood, including when you first hear them or see their eggs each year. Take photos to help with identification. Some natural history groups, such as local Audubon chapters, or institutions like the North Carolina Museum of Natural Sciences, offer public field trips to see winter-breeding amphibians. You can also participate in citizen-science projects like the Calling Amphibian Survey Program (CASP). The Museum of Natural Sciences and the three North Carolina aquariums include some winter-breeding amphibians in their exhibits.



mud snake

Read and Find Out

- "A Wood Frog's Life" by John Himmelman, Children's Press, 1999.
- "The Frogs and Toads of North Carolina: Field Guide and Recorded Calls" by Michael E. Dorcas, Steven J. Price, Jeffrey C. Beane and Sarah Cross Owen, North Carolina Wildlife Resources Commission, 2007.
- "Frogs and Toads of the Southeast" by Mike Dorcas and Whit Gibbons, University of Georgia Press, 2008.
- "Salamanders of the Southeast" by Joe Mitchell and Whit Gibbons, University of Georgia Press, 2010.
- "Amphibians and Reptiles of the Carolinas and Virginia, 2nd edition, revised and updated" by Jeffrey C. Beane, Alvin L. Braswell, Joseph C. Mitchell, William M. Palmer and Julian R. Harrison III, University of North Carolina Press, 2010.

In *Wildlife in North Carolina*

- "The Tiger Salamander" by Lawrence S. Earley, January 1990.
- "Back to the Pond" by Lawrence S. Earley, December 1991.
- "Ice Water in Its Veins" by Jeff Beane, December 2000.
- "Bashful Tiger" by Jeff Beane, December 2004.
- "How Do Frogs Survive Winter?" by Jeff Beane, December 2005.
- "The Secret Frog" by Jeff Beane, April 2007.
- "The Mating Dance of the Spotted Salamander" by Bob Palmatier, February 2011.

Find out more about Project WILD Workshops and literature at the Wildlife Commission's website at ncwildlife.org.

The Wildlife Endowment Fund

An Investment for the Future

Established in 1981, the Wildlife Endowment Fund allows the Wildlife Resources Commission to accept tax-deductible contributions for wildlife conservation. Money from the sale of lifetime licenses is also placed in this fund. Your donation or purchase will ensure that North Carolina will have a rich wildlife heritage for generations to come.

Lifetime License Form

Infant and Youth *(check appropriate block)*:

☐ Sportsman Infant $200
(under 1 year old—Application must be received before applicant has attained 1 year of age.)

☐ Unified Sportsman/Coastal Recreational Fishing Infant $275
(under 1 year old—Application must be received before applicant has attained 1 year of age.)

☐ Sportsman Youth $350
(ages 1 through 11—Application must be received before applicant has attained 12 years of age.)

☐ Unified Sportsman/Coastal Recreational Fishing Youth $450
(ages 1 through 11—Application must be received before applicant has attained 12 years of age.)

A copy of the birth certificate must accompany applications for infant and youth licenses. Birth certificate documentation cannot be returned.

Note: Pending satisfactory completion of the hunter safety course, persons who possess infant or youth licenses may exercise the privileges thereof when accompanied by an adult who is properly licensed to hunt in North Carolina. "Accompanied" is defined as maintaining a proximity to the hunter which enables the adult to monitor the activities of, and communicate with, the hunter at all times.

Adult (age 12 or older) *(check appropriate block)*:

☐ Comprehensive Inland Fishing $250
(N.C. residents only—includes basic inland fishing, trout & trout waters on game lands)

☐ Comprehensive Hunting $250
(N.C. residents only—includes basic hunting, big game, game lands & N.C. waterfowl)

☐ Sportsman $500
(N.C. residents only age 12 or older—includes basic hunting & inland fishing, big game, game lands, trout & N.C. waterfowl)

☐ Coastal Recreational Fishing $250
(N.C. residents only—includes coastal recreational fishing)

☐ Unified Sportsman/Coastal Recreational Fishing $675
(N.C. residents only—includes some privileges as the Sportsman, plus coastal recreational fishing)

A federal waterfowl stamp must be purchased separately for all N.C. hunting licenses.

Note: On or after July 1, 1991, a person, regardless of age, may not procure a hunting license or hunt in North Carolina without producing a certificate of competency for completing the hunter safety course or a hunting license effective prior to July 1, 1991, or by signing the statement below that he or she had such a license.

Check appropriate block and attach required copy:

☐ Copy of Prior Year Hunting License

☐ Copy of Hunter Safety Certificate of Competence

☐ In lieu of copy, I am signing the statement below:

Statement: I certify that I was a licensed hunter prior to July 1, 1991.

Signature _____ Date _____

Visit us online at www.ncwildlife.org or call 1-888-248-6834 for a complete list of lifetime licenses, including those for nonresidents and 65 and older.

Lifetime License

Complete the following information if applying for a lifetime license. Be sure to check appropriate block(s) on reverse side *(please print legibly)*:

Name of Applicant _____

Daytime Phone _____

Mailing Address _____

Resident Address _____

County _____ Date of Birth _____ Driver License # _____

E-mail Address _____

Is this license a gift? ☐ Yes ☐ No If yes, mail license to ☐ Donor or ☐ Applicant.

License Donor's Name *(if applicable)* _____

Donor's Telephone # _____

Donor's Mailing Address _____

City _____ State _____ Zip _____

Method of Payment: ☐ Check ☐ VISA ☐ MasterCard

Acct. # _____ Expires _____

Print name exactly as it appears on credit card _____

Cardholder's Signature _____ Date _____

Personalize your Lifetime License for an additional $5:
Indicate your selection of letters, numbers, dashes, periods, commas and /or blanks up to 6 spaces: __ __ __ __ __ __

Indicate your personal message including letters, numbers, dashes, periods, commas and /or blanks up to 21 spaces:

__ __ __ __ __ __ __ __ __ __ __
__ __ __ __ __ __ __ __ __ __

Signature of Applicant or Donor _____ Date _____

Note: Only adult lifetime licenses may be purchased by phone or online (VISA or MasterCard only). Call toll-free (1-888-248-6834) or visit us at www.ncwildlife.org. Use this form to purchase infant and youth lifetime licenses by mail.

Tax-Deductible Contribution

☐ I wish to make a tax-deductible contribution to the Wildlife Endowment Fund. Enclosed is my check for $ _____. *(Credit card payments cannot be accepted.)*

Name _____

Daytime Phone _____

Mailing Address _____

City _____ State _____ Zip _____

Make checks payable to: *Wildlife Endowment Fund*

Transactions are not considered final until the check has cleared the bank. Items purchased with a returned check will be made invalid. A service charge of up to $25 will be charged on any returned check. (N.C.G.S. 25-3-506)

Mail completed application and payment to:
NCWRC, License Section, 1707 Mail Service Center, Raleigh, NC 27699-1707

Office location: *NCSU Centennial Campus, 1751 Varsity Drive, Raleigh, N.C. 27606*
Telephone: 1-888-248-6834 (2HUNTFISH)

Cold Water Dancing

CREATE A LESSER SIREN PAPER SCULPTURE

1) Copy design onto sturdy paper. (card stock)

2) Cut out all three parts along black outlines.

3) Match and glue body together. (Begin with head.)
- Cut slit along black line in neck.

4) Fold legs and gills up along – – – line, folding in half.
- Fold each leg and gill down along ···· lines.
- Unfold. Put glue on pink area and slide into slit under neck.
- Press shut and fold legs forward toward head.
- Fold gills down over legs.

5) Poke needle and thread through spot on back and hang.

If you make several lesser sirens, you can create a mobile of winter-breeding salamanders.

back porch

NEWS *and* NOTES

Edited by Mike Zlotnicki

Bridges Wins National Award

PHOTOS: COURTESY OF *FIELD & STREAM* MAGAZINE

In 2004 Eddie Bridges of Greensboro was awarded the Budweiser Conservationist of the Year title. He put the $50,000 grant into the coffers of his N.C. Wildlife Habitat Foundation, which has raised almost $4 million to fund projects across the state.

And he's done it again.

Field & Stream magazine has named Bridges its 2012 Conservation Hero of the Year. In each issue of the magazine *Field & Stream* highlights three people who are active in conservation. Bridges, 79, was profiled in the Feb. 2012 issue. Along with the recognition came $500, which he put into his new quail habitat fund. On Oct. 4 Bridges attended a banquet at the Reagan Trade Center in Washington, D.C.

"It was a pretty exciting sort of thing," said Bridges. "All the finalists got $5,000, and that went into the quail fund."

Later that evening Bridges was named the winner and received the keys to a Toyota Tundra pickup truck (Toyota was the main sponsor of the award). Bridges had just purchased a Chevrolet Equinox, but decided to keep the Tundra and donate it to the NCWHF.

"It would have been a horrible insult to sell the truck and keep the Chevy," he said.

Bridges lauded his fellow finalist's projects, but suggested his body of work may have been what won it for him.

"Eddie's work is a catalyst for successful and creative conservation projects," said David Ramsey, the 2011 Conservation Hero of the Year and one of this year's judges. "Other states have patterned their own wildlife endowment funds after what has been done in North Carolina using Eddie's ideas."

"He has made enthusiasm for conservation contagious," added co-judge Melissa Simpson, the director of government affairs and science-based conservation with Safari Club International.

In *Field & Stream*, Bridges talked about his foundation.

"The key for the NCWHF is that when we convince someone to give, we don't squander their money, and we don't come back to them asking for another gift next year—but people continue to give. I think it is important that our projects are diverse: We purchase land, fund education, and help restore habitat. It's a powerful thing to secure a parcel of land forever for hunting and fishing purposes. It's also crucial to keep kids interested. I've been hunting and fishing since I was 6 years old, and I'm still kind of addicted to it, so I stay very active. I just turned 79, I don't wear glasses, and I don't need a walker or false teeth, so I think it's done me some good. Because we don't touch the principal in the trust, we're just doing what's worthwhile when we can afford it. We're lucky that our partners embrace us in a big way and make things work for us. So we'll keep cranking up this machine and letting it run for a while —I think the dividends are still to come."

e NEWSLETTER

Get N.C. Wildlife Update—news including season dates, bag limits, legislative updates and more—delivered to your Inbox from the N.C. Wildlife Resources Commission. Sign up at ncwildlife.org/enews.

Trout Anglers Take Note

NCWRC

Anglers interested in getting comprehensive information on trout fishing in North Carolina now have a one-stop resource at their fingertips.

The N.C. Wildlife Resources Commission's new trout fishing webpage (ncwildlife.org/fishing/trout) provides information a trout angler needs when planning a fishing trip in the mountains.

Looking for a new stream to try? Click on the Trout Fishing Maps link at the top of the page to find maps of Public Mountain Trout Waters — including a new interactive map.

Want to know when Delayed Harvest regulations go into effect or what the size and creel limits are for Hatchery Supported waters? Click on the trout signs gallery icon to view information, including seasons and limits, on the seven classifications for trout streams in North Carolina.

Current trout stocking information, as well as materials discussing life history characteristics of the three trout species found in North Carolina, also can be found on the trout fishing page.

"We wanted to consolidate all the trout-related information on our website into one page so that trout anglers could find the information they needed as quickly and easily as possible," said Jacob Rash, the coldwater research coordinator for the Wildlife Commission's Division of Inland Fisheries.

MIKE ZLOTNICKI/NCWRC

N.C. State Fair Drawing Winner

Roy Warren, Jr., right, of Garner accepts his new Leupold rifle scope from Jenny Harris, marketing director at the N.C. Wildlife Resources Commission. Warren won the scope by subscribing to *Wildlife in North Carolina* at the state fair and being entered in the raffle.

Hatley Promoted to Enforcement Captain

The N.C. Wildlife Resources Commission has promoted Michael Hatley to captain for District 8, where he will manage and supervise enforcement operations for hunting, inland fishing and boating, and coordinate boating safety and hunter education programs.

MELISSA MCGAW/NCWRC

Col. Dale Caveny, left, congratulates Capt. Michael Hatley on his promotion.

Capt. Hatley, a 22-year veteran with the commission, will supervise 23 wildlife enforcement officers and one hunter education specialist in a jurisdiction made up of Avery, Burke, Caldwell, Catawba, Cleveland, Gaston, Lincoln, McDowell, Mitchell, Yancey and Rutherford counties. Capt. Hatley was previously a lieutenant in the district.

"I grew up hunting and fishing with my dad and granddad, so I know the importance of conservation," Hatley said. "Along with fellow wildlife officers, I will work for conservation in this region and promote the lawful use of resources. And I will continue to promote safety to our constituents who enjoy outdoor recreational activities like hunting, fishing and boating."

Hatley lives in Valdese with his wife, Annette, and their two daughters, Helena Louise, 7, and Speed Kara, 6. He holds a Bachelor of Science degree in Fisheries and Wildlife Science from N.C. State University.

"Capt. Hatley is a proven leader in the western region and he has my confidence and support in his new position," said Col. Dale Caveny, chief of law enforcement for the Commission. "His sense of public service and knowledge of those local communities will be of great benefit to all of us."

Dixie Deer Classic Coming

Mark your calendars March 1–3 for the 33rd Annual Dixie Deer Classic. It's a big event, sponsored by the Wake County Wildlife Club and spread out over 175,000 square feet indoors and numerous outdoor exhibits. The DDC is a family-oriented event with kids 13–18 in at half price ($5) and under 13 free. Kids can participate in fun face painting, BB gun turkey shoot, Archery Alley and watch retriever demonstrations.

The Jim Graham Building will feature exhibitors from many areas of hunting and also seminars. The Exposition Center will again house the "bragging boards" from deer scored at the DDC and also special mount exhibitions.

Visit dixiedeerclassic.org for details.

CALENDAR OF EVENTS

Friday–Sunday, Jan. 11–13

The Bass & Saltwater Fishing Expo cranks up January 11th for its 23rd year with more than 18 boat dealers and many tackle dealers, guides and boat accessories in house at the state fairgrounds. Other attractions include free seminars on saltwater and freshwater fishing. Visit ncboatshows.com.

Tuesday, Jan. 15

The Outer Banks Center for Wildlife Education in Corolla will host the Currituck Park Winter Lecture Series with a focus on whales—the historical, cultural, commercial and scientific significance of whales along the Outer Banks. 10 a.m.–1 p.m. Visit ncwildlife.org/Learning.

Saturday–Sunday, Jan. 19–20

Head east for more waterfowl goodness to the 4th Annual Mattamuskeet Decoy & Waterfowl Festival. The exhibits will be held in the Mattamuskeet High School and include a decoy competition, tours of the refuge and retriever demonstrations. Visit hydewaterfowl.com.

Saturday–Sunday, Feb. 9–10

Check out the new 2013 N.C. Duck Stamp at the 18th Annual East Carolina Wildlife Arts and Decoy Carving Festival in Washington. Lots of wildlife art for sale along with calling and carving competitions and retriever demonstrations. Visit eastcarolinawildfowlguild.com.

Monday, Feb. 18

Spend a relaxing morning with experienced fly-tiers who teach the fundamentals of fly-tying at the Pisgah Center for Wildlife Education. Learn to tie a basic pattern. Equipment and materials provided. 9 a.m.–12 p.m. Ages 12 and up. Visit ncwildlife.org/Learning.

Readers should check with the contact listed before traveling to an event. Items for listing should be conservation-oriented and should be submitted at least four months in advance to mike.zlotnicki@ncwildlife.org, or call 919-707-0175.

Invasive Flatheads Killing Yadkin Bullheads

KIN HODGES/NCWRC

Snail bullheads and flat bullheads, also known as mudcats or yellow cats, have declined significantly throughout the upper Yadkin River, due to the introduction of the non-native flathead catfish—a voracious predator that has an appetite for bullheads.

Fisheries biologists with the N.C. Wildlife Resources Commission recently completed a series of electro-fishing surveys in Surry, Yadkin and Wilkes counties and found that bullhead catch rates near Elkin had declined from a high of 120 fish collected per hour in 2005 to fewer than three fish collected per hour in 2012.

Biologists have documented an even more extreme decline of bullheads in the Yadkin River below Idols Dam near Winston-Salem. No bullheads have been collected from this section of the Yadkin River since the 1980s.

Idols Dam historically had served as a barrier to help keep flathead catfish out of the upper Yadkin River, according to Kin Hodges, a fisheries biologist with the commission. Because of this, bullheads had remained plentiful above the dam, until recently.

These latest survey results from the upper portion of the river confirm that when flathead catfish are introduced in a river system, other fish populations decline significantly, either through direct predation by flathead catfish or through indirect competition for food.

"Sharp declines in bullhead abundance have been documented in other river systems in North Carolina and throughout the southeast where flatheads have been introduced," Hodges said.

While, on the surface, it might seem like a good idea, once a non-native species becomes established within a river system, very little can be done to mitigate the impacts.

"To prevent episodes like this one from playing out in other water bodies across the state, it is imperative that anglers do not release any species of fish into streams, rivers or lakes where they were not taken," Hodges said. "The introduction of exotic fish species into North Carolina waters is among the most significant threats to populations of both game fish and nongame fish alike."

IN SEASON

In January and February, these seasons are open in North Carolina:

Black Bear: Through Jan. 1 (see *Regulations Digest* for locations).
Bobcat: Through Feb. 28.
Brant: Through Jan. 26.
Canada Goose and White-Fronted Geese: Resident Population Zone through Feb. 9; Northeast Hunt Zone (permit only) Jan. 19–Jan. 26.
Common Snipe: Through Feb. 28.
Crow: Through Feb. 28.
Ducks, Coot and Mergansers: Through Jan. 26.
Sea Ducks (In special sea duck area only): Through Jan. 31.
Fox: See *Regulations Digest* for seasons and locations.
Hatchery Supported Trout Waters: Through Feb. 28.
Light Geese (Snow, Blue and Ross'): Through March 9.
Mourning Dove: Through Jan. 11.
Pheasant: Through Feb. 1.
Quail: Through Feb. 28.
Rabbit: Through Feb. 28.
Raccoon and Opossum: Through Feb. 28.
Ruffed Grouse: Through Feb. 28.
Squirrel: Gray and red through Feb. 28.
Tundra Swan: Through Jan. 31 (by permit only).
White-Tailed Deer: Eastern: gun season through Jan. 1. Central: gun season through Jan. 1. Northwestern: through Jan. 1. Western: closed.
Woodcock: Through Jan. 26.
Youth Waterfowl Days: Feb. 2 and Feb. 9.

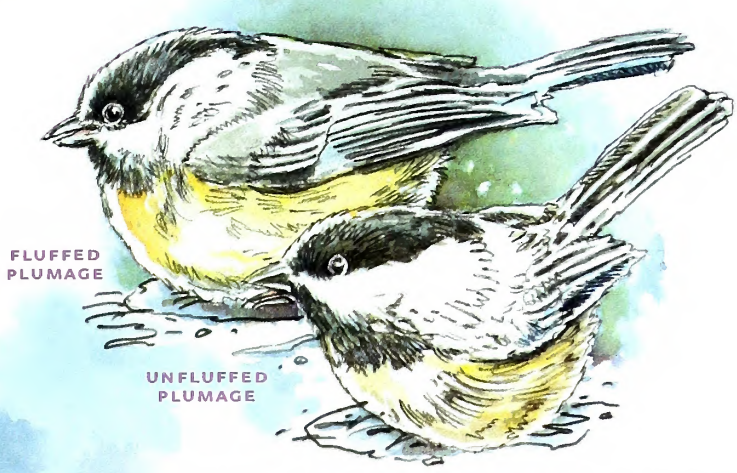
There is no closed season or bag limit for feral swine, coyote, groundhog, striped skunk, nutria and armadillo. There is an open season for taking beaver with firearms or bow and arrow during any other open season for the taking of wild animals.

Check the latest *North Carolina Inland Fishing, Hunting and Trapping Regulations Digest* for bag limits and applicable maps or visit ncwildlife.org.

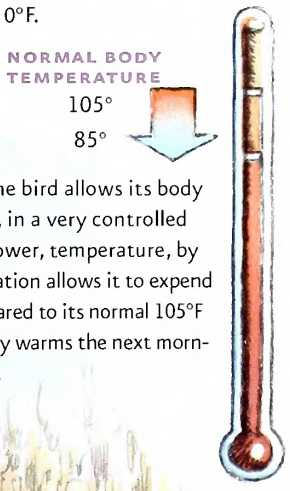
Why Don't Chickadees Freeze to Death in Severe Winters?

written by Clyde Sorenson
illustrated by Jim Brown

TINY WARM-BLOODED ANIMALS, with their high surface area to volume ratio, are in a constant struggle to avoid heat loss and subsequent death in very cold weather, particularly at night, yet Carolina chickadees seem to blissfully weather the harshest conditions. Chickadees have a number of adaptations that allow them to not only survive, but thrive, during the coldest winters.



A chickadee's plumage is obviously one factor contributing to their ability to conserve heat. In extremely cold temperatures, the bird erects its body feathers, trapping highly insulating dead air. This insulation, when fluffed to its full 6/10" depth, is so effective that the bird's breast will be 105°F even though the surrounding air is a bitter 0°F.



At night in very cold weather, the bird allows its body temperature to drop about 20°F, in a very controlled fashion. It maintains this new, lower, temperature, by periodic shivering, but this adaptation allows it to expend much less energy overnight, compared to its normal 105°F temperature. The chickadee rapidly warms the next morning as it resumes normal activity.

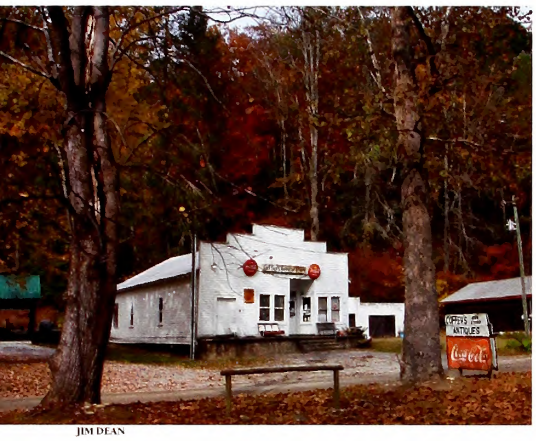
The bare legs would also seem to be a place where a tremendous amount of heat could be lost, but the bird has a heat-exchanging arrangement of the blood vessels in its legs. Hot arterial blood flowing towards the feet gives its heat up to the cold venous blood leaving the feet, pre-warming it as it returns to the heart.

Yet another way chickadees conserve heat and metabolic energy is by huddling together with others in communal roosting cavities. The best cavities (the ones that lose the least heat) are in large, live trees. Other birds, such as bluebirds, also exploit this strategy.

A River Lives

written by Jim Dean

Fifteen miles west of Lenoir, I turned onto the familiar gravel road at Brown Mountain Beach and poked along trailing a plume of dust for 12 more miles up the Wilson Creek gorge to Mortimer. Autumn colors marched up the ridges into a brilliant blue sky and leaves twirled lazily across the road. Here and there, I could catch a glimpse of the creek sparkling on my left far below me. Three miles farther, I pulled into the small settlement of Edgemont nestled deep in mountainous folds.



JIM DEAN

I have driven this narrow road countless times over a 50-year span to fish the trout streams and explore the wild isolation of what had once been the 80,000-acre Daniel Boone Wildlife Management Area (now part of the greater Pisgah National Forest). For most of those years, I rented a tiny primitive cabin on the hill behind Archie Coffey's store in Edgemont for the princely sum of $10 a month. It was easy to believe that you had erased a century coming into this remote valley.

"It was easy to believe that you had erased a century coming into this remote valley."

But this trip up the gorge was different because it was no longer marked by a nagging concern about the fate of this place. A peaceful stability has at long last settled here, and it seems increasingly unlikely that this area will see the disruptive changes that were once planned for it.

The road itself posed perhaps the biggest threat. For many years, local government and the U.S. Forest Service envisioned a modern two-lane paved road up the gorge that would trigger extensive tax-yielding development and improve logging access. Three bridges over Wilson Creek were replaced with wider modern bridges that would accommodate such a road, and there were rumors that similar ambitious plans were under consideration for the very steep and winding road descending into the valley from Linville. There was also a local proposal to pave the main road through Edgemont (to connect eventually with the road up the gorge), but it failed to get the needed support after a spirited debate that lasted several years.

Meanwhile, opposition to these plans was growing out of concern about impacts on Wilson Creek and the near impossibility of satisfying environmental requirements, and there was growing sentiment that leaving this area in a more natural state could also have long-term economic benefits. But most important, the huge costs of the road projects were making them seem increasingly prohibitive to even their most avid proponents.

At any rate, the 2008 economic downturn derailed the momentum for road-enhanced development, at least for the immediate future. The designation of Wilson Creek as a National Wild and Scenic River with a new visitor center also gave the creek greater environmental protection and public support than ever before.

There were also other significant influences. The O.P. Lutz family was approached to sell its large and desirable holdings straddling Wilson Creek between Mortimer and Edgemont for a planned development with expensive homes and a resort atmosphere. Instead, the Lutz family generously chose to sell to the Foothills Conservancy to ensure that the land they had cherished would remain essentially in its natural state.

The N.C. Wildlife Resources Commission now owns the former Lutz property, and the stretch of Wilson Creek that runs through it is one of North Carolina's most popular Delayed Harvest trout waters. This stocked and carefully regulated water has also had the added benefit of reducing fishing pressure on wild trout in the region's other more remote streams.

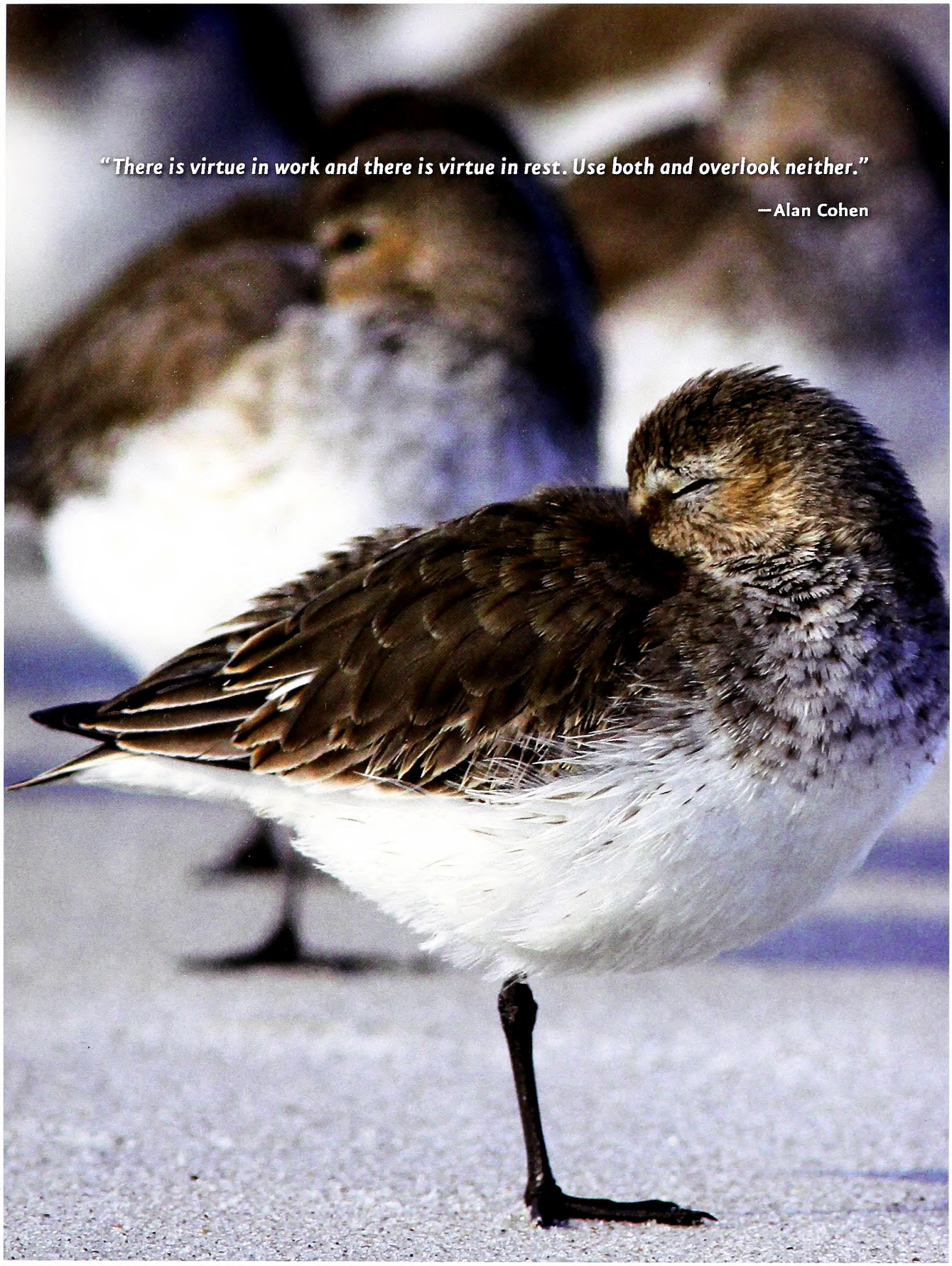
The U.S. Forest Service has also undertaken a big commitment to the future of Wilson Creek by creating parking areas and public toilet facilities along the creek, and restoring sites to their former natural beauty.

There isn't room to credit the hard work of all the individuals, conservation groups and government agencies that helped achieve this near miracle, but one would hope that even those who earlier had another vision for this area are now proud of how things have turned out.

As I drove up Wilson Creek, I punched in a tape of classic bluegrass songs honoring the local history of this area—"Brown Mountain Lights," "The Ballard of Bill Crump," "Old Troop" and others that my old friend A.J. Johnson had loved to sing with us at his Edgemont cabin in the 1960s. Surely, what I was seeing as I drove up the creek would have astonished and delighted him.

I'll admit that a part of me misses the old fishing shacks, bus campers and other derelict artifacts—the 1920s Ford rusting in the river—once so prevalent along the road, and the road itself no longer presents a four-wheel drive challenge. There are also more visitors and less of that "back of beyond" atmosphere.

But only in Edgemont did anything seem truly amiss. Archie Coffey's old store is now closed, possibly for the first time since the 1940's flood. If it opens again someday, I hope to live to see that, too.

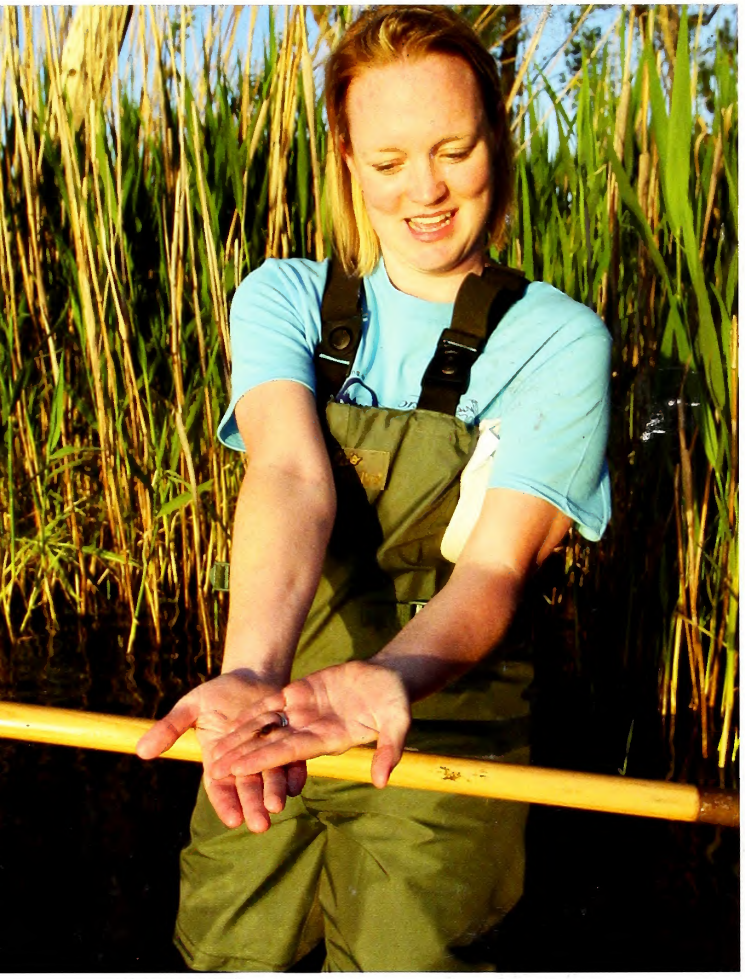


JOHN PELKANSKA

Dunlin

OUTDOOR MOMENT

IN THE MARCH • APRIL ISSUE



MELISSA McGAW / NCWRC

BOW ROOKIE

What happens when a city girl attempts to learn her way around guns and fishing rods?

SHOCKINGLY GOOD

White Lake, a popular boating and water-skiing destination, also is home to a healthy population of yellow perch.

WESTERN TRIFECTA

Combine turkey hunting, trout fishing and birding on a visit to Mitchell and Yancey counties.

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